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The question of style in daguerreotype and calotype portraits by Antoine Claudet

Linda Vance Sevey

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THE QUESTION OF STYLE
IN DAGUERREOTYPE AND CALOTYPE PORTRAITS
BY ANTOINE CLAUDET

A Thesis
Presented to
The Faculty of the School of Photographic Arts and Sciences
The Rochester Institute of Technology

In Fulfillment
of the Requirements for the Degree
Master of Fine Arts

by

Linda Vance Sevey

Accepted by her Thesis Board:
Robert A. Sobieszek
Irving Pobboravsky
Grant Romer

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THESIS PROPOSAL

for
The Master of Fine Arts Degree

College of Graphic Arts and Photography
School of Photographic Arts and Sciences

ROCHESTER INSTITUTE OF TECHNOLOGY

*************************************************************************

TITLE: Antoine Francois Jean Claudet (1797 - 1867)

PURPOSE: To research and present a written, illustrated monograph on the work of the 19th century daguerreotypist, Antoine Claudet. The paper will discuss and evaluate Claudet's technical and aesthetic contributions to the field of photography, and his relationship to other photographers and influential figures of the period.

Submitted by: October 9, 1975
Linda Vance Sevey

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Aside from a few brief and scattered references in the literature of the history of photography*, little has been written about Antoine Claudet and his contributions to the photographic field. Claudet obtained the first license to practice daguerreotypy in England from Daguerre, and opened his portrait gallery in London in late spring of 1841 (several months after Richard Beard had opened his daguerreotype gallery). Claudet's gallery grew to become one of the leading daguerreotype studios in Europe, and Claudet soon became an influential figure in the field of photography. He was a strong spokesman for the recognition of photography as art, and a well-known scientist who regularly delivered papers at professional societies on the theory and practice of photography. His scientific writings often involved his own discoveries - in the fields of optics, chemistry, and mechanical science - which influenced the direction of photography in England, the United States and Europe.

Although much of Claudet's work was destroyed in a fire at his studio in January, 1868, one month after his death, sufficient material remains in collections in the U.S. and in England to establish his importance and his artistic, technical and intellectual interests.

The International Museum of Photography at the George Eastman House holds in its Claudet collection: many stereo daguerreotypes, albumen prints, and several calotype negatives. In addition, the Museum owns probably the largest body of Claudet letters, manuscripts, and sketches.

The Gernsheim Collection at the University of Texas, Austin, Texas, contains a number of stereo daguerreotypes, daguerreotypes and two albumen prints.

In England, the private collection of Mr. and Mrs. Claud Claudet contains some Claudet manuscripts and daguerreotypes, although the extent of the collection is unknown. In addition, the collections of the Royal

Photographic Society in London and the Fox Talbot Museum at Lacock Abbey, Wiltshire, both contain some Claudet works. Further investigation could provide information on daguerreotypes by Claudet in other private collections.

SCOPE:

The thesis will consist of a manuscript combining text with visual images. The visual material—reproductions of prints and daguerreotypes, sketches, diagrams and other relevant images—will be strongly emphasized not only as illustrative material, but as important information sources in themselves. Claudet's inventive approach to photography and his total curiosity in regard to visual phenomena makes an approach utilizing visual as well as verbal material highly appropriate.

The manuscript will deal with the following subjects:

I. Claudet's technical and visual achievements
   a. Claudet's own imagery in the form of daguerreotypes, stereo daguerreotypes and photographic prints.
   b. Technical discoveries, innovations and patents: Claudet's focimeter, dynactinometer, stereomonoscope, photographometer, etc., as well as such patents as the darkroom light, painted backgrounds, and others.
   c. Processes and applications: photosculpture, stereography, experiments with illusionary motion.

II. Relationship of Claudet and his work to the period:
   a. Relationship to other photographers—Beard, Mayall, Kilburn, Cameron, Fox Talbot, etc.
   b. Relationship to intellectual, scientific, artistic and social climate of the time.

PROCEDURES:

Research at the George Eastman House will be supplemented with research at the Gernsheim Collection, Austin, Texas, and if possible, in England. Sources include: original manuscripts and letters by Claudet, original prints and daguerreotypes by Claudet and his contemporaries, articles published in periodicals and journals, and secondary sources.

The final project will consist of: a completed manuscript in book form available for inspection at R. I. T. library.
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PREFACE

My interest in Antoine Claudet began several years ago when I was doing research on stereography at the George Eastman House. In the museum collection are a number of stereo daguerreotypes by Claudet and many original letters and manuscripts donated by Claudet's grandson, Henry H. Claudet and his daughter, Mrs. Georgina Gilchrist. The more I looked at his work, the more it appeared that Antoine Claudet was a pioneer not only in the technical areas of photography, but on some of its aesthetic frontiers as well. In addition his work taken as a whole contained a certain cohesiveness and a direction which made it possible to talk about a style.

Claudet's images are of people photographed in a studio setting - individual men and women of all ages, children, couples, and family groups. Seeking a good likeness, they flocked to Claudet's studio, but Claudet wanted a portrait that was pleasing to the eye as well. His foremost aesthetic explorations dealt with the challenges inherent in representing sculptural forms within a 3-dimensional space on a 2-dimensional daguerreotype surface. To this end he experimented with lighting and modelling techniques, props and painted backgrounds, lenses, and other devices in order to exploit fully photography's potential.

I have divided Claudet's work into three groups based on his different galleries primarily to facilitate dating. Stylistic changes occur in the groups also,
especially between the Adelaide Gallery/18 King William Street periods and the 107 Regent Street period, when Claudet moved into his spacious and elegant new quarters and at the same time became involved with stereography. Within the three gallery divisions themselves, the Adelaide Gallery period (1841-47), a formative stage, represents the most significant changes in style. Flat lighting, painted sets, and subjects in stiff, frontal poses with frozen expressions are found among the earliest portraits. In a few years time, however, by around 1843, a faster lens, and more control in the handling of light vastly improved Claudet's work. And towards the end of the Adelaide Gallery period, c.1845, a personal style becomes evident. Lighting, now subtle but not flat, enhances sculptural form, while subjects are arranged in poses that interact with the surrounding space. Expressions reflect a "classic serenity," avoiding the emotions of the moment.

Work from the 18 King William Street period is distinctive in its tight cropping, predominance of robust, forceful personalities, and close camera position. Some of these curious differences in style may be accounted for by the existance of another photographer working in Claudet's second gallery at the Colosseum. At this time also in the portraits an interest in elegant accessories and rich details emerges.

The period of "The Geography Lesson" (1851), beginning in
1851 and continuing through the mid-1850s, marks Claudet's mature style. Most of his work at this time is in stereo daguerreotype. Careful control of lighting, arrangements of people and objects within a well-defined, 3-dimensional space, and serene, detached expressions of subjects are characteristic of the style. Claudet now assumes the role of stage director, arranging sculpture-like tableau vivants for his camera.

In the late phase of Claudet's career conventions regarding poses, sets and expressions predominate. Space becomes more diffuse. A standard parlour set, certain genre themes, predictable poses and attitudes typify portraits from this period.

Sometime during the late 1850s or early 1860s Claudet produced portraits which tend towards abstract pictorial statements. In addition to portraying a personality the portrait is a vehicle for the expression of formal ideas - the play of plastic forms in space. Such a trend may parallel Claudet's beliefs about photography vis-a-vis art late in life when he says, "portraits...should as much as possible resemble a work of art..." (1866). Although Claudet was referring specifically to soft focus in photography at the time, the statement can also be taken as a general endorsement of formal values in photographs. In this sense Claudet's portraits, such as "Boy with a Mirror" or "Lady with White Scarf" did resemble paintings but on a deeper level rather than imitating
the soft look of some graphic art. From the beginning Claudet saw a kinship between the painted and photographic portrait, and throughout his life he advocated a reciprocal nuturing relationship between the two media.

Claudet's spatial concerns, the timeless serene expressions in which he fixed his subjects, and meticulous attention to detail distinguish his work from that of his contemporaries, notably his main competitor of the 1840s, Richard Beard.

I have chosen to discuss only the daguerreotypes and calotypes - omitting the late albumen prints and carte de visites - because they best represent his work. Carte de visites were generally mass produced with standardized poses and repetitive sets, and as a result are dull in comparison with the daguerreotypes. Although some of the albumen prints are quite beautiful, so few exist, it is difficult to discuss them as a group.
INTRODUCTION

FINE ARTS
Self-Operating processes of Fine Art
The Daguerotype

An invention has recently been made public in Paris that seems more like some marvel of a fairy tale or delusion of necromancy than a practical reality: it amounts to nothing less than making light produce permanent pictures, and engrave them at the same time, in the course of a few minutes. The thing seems incredible, and but for indisputable evidence, we should not at first hearing believe it; it is, however, a fact: the process and its results have been witnessed by M. Arago, who reported upon its merits to the Academie des Sciences...¹

With these words a contemporary writer described the marvel of Daguerre's new image-making process that employed the light of the sun itself to form pictures. The article, published in the London Spectator, February 2, 1839, more than six months before Daguerre revealed the secrets of his invention, aroused much curiosity and excitement.

It was received by a public accustomed to new ideas and inventions, for in England by 1839 the Industrial Revolution was well under way. Technological progress had already produced steam locomotives, mills, factories, and many new machines. This was the society that would make its mark on architecture not with a church or a castle but with the Crystal Palace, an exhibition hall. Advances in the natural and technical sciences were demonstrated and explained daily at science institutions such as the Royal Adelaide Gallery of Practical Science or the Royal Polytechnic Institution. At one of these institutions a
person could see and learn about such novelties as "the living electric eel," steam engines, safety signal lamps, and the microscope. If one wished, he could descend into a 14-foot reservoir in a "diving bell," see the latest "open dress" diving suit, or listen to a performance on the newly invented musical instrument, the Terpodion. It was in this way that most Englishmen were introduced to the process of daguerreotypy, for in early October 1839, J. T. Cooper demonstrated the new technique at the Royal Polytechnic Institution, while M. de St. Croix gave lectures and demonstrations on the daguerreotype at the Royal Adelaide Gallery of Practical Science.

The announcement of the daguerreotype process along with the many other contemporary discoveries and inventions served to heighten people's awareness of changes within the world and their own lives. Transformations appeared everywhere; the look of the land was changing too. Railroads carved out their new sculpture of valleys and embankments on the countryside while mills and factories gave birth to unruly urban centers.

It was a time of political change as well. Acquiescing to the strengths and demands of the middle class, the aristocracy largely retired to its country estates. The new power group, the middle class, was complex in structure. The upper-middle class included the richer clergy, the successful writers and Royal Academicians, the ship owners, bankers, and manufacturers of more than a generation's standing. Below them came the middle class: independent farmers, prosperous tradesmen, attorneys, and school teachers, etc. And the lower-middle
class included farm laborers, servants, municipal employees, factory hands, and finally the unemployed and unemployable, the miserable and poverty-stricken who suffered most from the social evils of advancing industrialism.\textsuperscript{2} The crystallization of the class structure had happened like the fixing of an image on a plate, with surprising speed and - as would become apparent - remarkable durability.

The railroad has been used as a symbol of the early Victorian period, but photography makes an appropriate symbol as well. Not only did it capture the public's imagination, it also contributed to profound social changes. Both the railway and the photograph were introduced into England during the same decade - the railroads at the beginning of the 1830s and photography at the end. With the railroad and photography, the natural world became more accessible and more penetrable than it ever had been. Once distant places were brought near and heretofore unrecorded scenes and objects suddenly seemed available for observing and documenting. Both inventions generated new visual sensations, and both the railroad and photography emphasized speed. Portraits could be made relatively inexpensively in a few seconds; transportation became faster and cheaper.

It is in the general context of the Industrial Revolution that the announcement of Daguerre's invention must be seen. Daguerreotypy, the precursor of contemporary photography, delighted most, it threatened or confused some, and opened a whole new field of discovery and opportunity for entrepreneurs,
scientists, artists and men like William Fox Talbot and Antoine Claudet, who had that peculiar mid-19th century combination of business sense, technical ability and love of beauty.

*****

Antoine Claudet was in many ways representative of the period in which he lived. He was a well-educated member of the upper-middle class and a successful businessman who sensed the direction and tempo of his time.

What sort of person was Claudet? Some impressions of him emerge from reminiscences. Sir David Brewster wrote:

"His scientific acquirements and his inventive genius were of a very high order, and his kind nature and generous character will be acknowledged by all who had the pleasure of knowing him."

An intimate friend remembers Claudet's enthusiasm and unflagging energy:

"...There he would be, day after day, among the fumes of mercury and iodine - careless of life or health - experimenting, producing, expounding, never tiring, never desponding in his aspirations."

In the United States H. Snelling, editor of *The Photographic Art Journal*, urged American photographers to follow Claudet's example:

"M. Claudet is not only one of the most theoretical but practical Daguerreotypists of Europe, and no man in the Old World deserves more credit for his perservering energy in experimenting and improving his art. He does not confine himself to the mere role of making money; his whole soul seems wrapped up in the study of his art, and instead of making it a mechanical business, he raises it to its proper sphere among the arts and sciences. I wish I could point to more than one artist in this country to emulate him. Our operatives should not be content..."
with the superiority of their pictures over those of Europeans, but they should know the cause, and knowing should be able to explain it. They should study their art, and the sciences connected with it, much more than at present.

John Werge gives Claudet a particularly British commendation:

In his intercourse with his confreres, he was always courteous, and when I called upon him in 1851 he received me most kindly. I met him again in Glasgow and many times in London, and always considered him the best specimen of a Frenchman I had ever met.

*****

When the details of Daguerre's discovery were made public (on August 19, 1839), Antoine Claudet was 42 years old and had been living in London for 12 years. By then he was commercially well-established in London as an importer of French glass.

Born in Lyons, France, on August 12, 1797, Antoine François Jean Claudet was one of six children of Claude Claudet and Juliette Montagnat. Antoine was only 10 years old when his father died leaving the young Juliette with four daughters and two sons. Once a prosperous landowner, Claude Claudet had been ruined by the Revolution. His misfortune and the frightful scenes he had witnessed during the Revolution seriously affected his health and purportedly hastened his death in 1807.

Little is known regarding Claudet's education, although it is likely that he attended public schools in Lyons and received a sound education. An account of Claudet's early adult life in France was given in a brief family history by his oldest child, Mary:

# Numbered dots refer to illustrations (transparencies) beginning after text.
My father went to Paris in 1818 and was sometime with his Uncle M. Roux (also of Lyons) banker in Paris. In 1821 my father married the daughter of John Marie Bourdelain, (of Lyons) who had come to England at the worst time of the Revolution, his father having fallen victim to the Guillotine. He came to London with good recommendations after an eventful journey, and was soon able to establish himself as a merchant, became naturalized Englishman, as it seemed essential to his success. On visiting Paris with his wife and daughters he met my father at M. Roux's, who was an old friend from Lyons. My father was much struck with his (Bourdelain) daughter Julia who was then considered too young to be married but the impression remained and they were married in 1821 and went to France, lived Choisy-le-Roi where M. Roux placed him at the head of the glass manufactory in partnership with M. Bontemps. It is there that I and my brother Frederic were born.

In 1828, to expand the Choisy glass business into England, Claudet established a warehouse at 89 High Holborn, London, to import and sell the French glass shades and painted glass. Claudet and his family then moved permanently to England. By 1835 George Houghton had joined Claudet as a partner in the glass business. Advertisements for Claudet & Houghton glass such as the one below appeared regularly in periodicals:

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FRENCH GLASS SHADES...REDUCTION OF Prices, at CLAUDET & HOUGHTON'S Wholesale and Retail Warehouse, 89 High Holborn. The improvements and economy effected since the Introduction of the manufacture of Glass Shades in England, have reduced the cost of the same at a reduction of price averaging more than 10 per cent.

The following examples will suffice to give an idea of the new prices:

<table>
<thead>
<tr>
<th>Shade Style</th>
<th>Height</th>
<th>Diameter</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oval Shade</td>
<td>11</td>
<td>22</td>
<td>1 1/2</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>24</td>
<td>1 3/4</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>28</td>
<td>2 1/2</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>32</td>
<td>3 1/2</td>
</tr>
</tbody>
</table>

STRONG WINDOW GLASS, for Conservatories, Green Hothouses, &c., Crown and Stained Window Glass Warehouse, 89 High Holborn. London. It is observed to the advantage of those who build conservatories, &c., to have strong and solid windows, and to use only strong, durable window glass, which is now made by CLAUDET & HOUGHTON, at a very moderate price. The strongest window glass, however, is that made by CLAUDET & HOUGHTON, which, in spite of its great cost, is not only stronger than any other, but also more durable and long-lasting. It is made of the finest materials and is guaranteed to remain intact under all circumstances.

****

When on August 19, 1839, Daguerre revealed the secret of his new process to the world, Claudet was so taken with the beauty and potential of the new technique that he immediately
sought out Daguerre in Paris. In his own words:

Immediately on the discovery of Daguerre, I went to Paris, saw him, and bought from him the first license to work out his process under the patent he had taken in England...

Claudet probably made the trip to Paris at the end of the summer. I have been able to find no documentation of the first meeting with Daguerre or whether Claudet received instruction in the process from Daguerre personally.

In any case Claudet paid Daguerre £200 for the first license and a collection of daguerreotypes that he later presented to Queen Victoria:

I came back, brought all the specimens I could produce - made by his pupils...to instruct all the adepts and give them the information they wanted to master the process. I sent to the Royal Society's soirees the best specimens after having submitted a collection of them to the Queen, who kept the best of them. 10

The daguerreotypes that Queen Victoria did not keep, Claudet sold - those sales represented Claudet's first commercial venture into the new field. Within months Claudet was selling daguerreotypes and daguerreotype equipment along with his glass products at 89 High Holborn. The following ad for daguerreotypes appeared in The Atheneum in 1840: 11

Claudet imported the daguerreotype equipment and daguerreotypes from N. P. Lerebours, a Paris optician who manufactured photographic apparatus in competition with Daguerre's firm.
Lerebours and Claudet were business associates and friends. Claudet often stayed with Lerebours when in Paris and they collaborated on several projects. In fact, Helmut Gernsheim suggests that Claudet initially went to Paris for the daguerreotype license upon the advice of Lerebours.

Soon after his return from Paris Claudet began to experiment with the new process, and sometime in the spring of 1840 he set up a studio on the roof of the Royal Gallery of Practical Science on Adelaide Street, also called the Adelaide Gallery.

By July 1840, Claudet & Houghton ads for daguerreotypes included views of London, among other cities; it is very likely, as others have suggested, that Claudet was by then selling daguerreotypes that he had made in addition to those imported from Lerebours.

However, Claudet could not establish his own portrait gallery at this time for two reasons. First, and more pressing, was the technical problem of reducing the exposure time - and, thus, "sitting" time - to a practical length. One of Claudet's first portraits was of himself - stretched on his back because the plate required an exposure time of about 15 minutes. Eventually, after much experimenting, Claudet found that the inclusion of a second sensitizing stage, the addition of chloride of iodine, to Daguerre's preparation accelerated the light sensitivity of the plate. With this step an exposure that once had required four or five minutes took only 10 or 15 seconds. Claudet communicated his findings to the Royal Society on June 10, 1841.
The second reason was a legal one, but did not surface until Claudet actually opened his gallery in 1841. Claudet had to buy a license in order to make daguerreotypes because Daguerre's invention had been patented in England. The license Claudet secured was a professional license that permitted the use of three cameras anywhere in England. Claudet's agreement with Daguerre stipulated that if the British government or other public organization should buy the patent, Daguerre would refund Claudet's investment; if the prospective purchaser were private, Claudet would be given first option to buy the entire patent.

While Claudet was working privately on the roof of the Adelaide Gallery, making preparations to open his gallery to the public, Richard Beard - who had already opened the first daguerreotype portrait gallery in England - was negotiating to buy all rights to Daguerre's patent in England. In accordance with Daguerre's earlier agreement with Claudet, however, Daguerre's patent agent in London, Miles Berry, offered the entire patent to Claudet first. But Claudet was unable to afford the patent himself, and he was unsuccessful in persuading his partner, George Houghton, to help finance it. As a result, on June 23, 1841, Miles Berry sold the entire patent to Richard Beard - with the share which Claudet had previously purchased from Daguerre in question. Claudet had refused to sell back his license to Miles Berry and ultimately to Beard, contending that the clause in his initial agreement with Daguerre did not make it compulsory for him to resell his interest, although it
did oblige Daguerre to repurchase it.

As soon as Claudet opened his gallery as planned in late June or early July 1841, Beard tried to restrain his activities. On July 15, 1841, Beard took legal action that successfully enjoined Claudet "from using or exercising any portion of the apparatus or instruments called the Daguerreotype." 16

The case was taken to court soon after: the courts looked favorably upon Claudet's contention, and lifted the injunction on July 21, 1841. Thus began Claudet's career as a professional photographer. 17
THE QUESTION OF STYLE IN DAGUERREOTYPE AND CALOTYPE PORTRAITS BY ANTOINE CLAUDET

In an open letter to his compatriot Camille Silvy, who also operated a photographic gallery in London, Antoine Claudet once wrote:

...I find from my own experience, which is as old as photography itself, that nothing is more difficult than to produce photographs deserving to be looked at, that it requires thought, taste, judgement and refinement, to use with success the apparatus and the process, I consider that there is as much art in the result as in any of the so-called fine arts.18

Writing in defense of photography as fine art, Claudet's immediate goal was the placement of photography under the Art rather than the Machine section of the International Exhibition of 1862.

The statement also serves as a reminder that Antoine Claudet, who was famous as the most artistic portrait photographer of his day, has been largely neglected in ours. When his name does appear it is usually in connection with his scientific and technical discoveries, which, although numerous and significant, represent only part of Claudet's accomplishments. The aesthetic and stylistic aspects of his work deserve further study.

Because of a ruinous fire in Claudet's studio in 1868, one month after his death, and because his surviving work is so scattered, any study of Claudet's style can be based on only a fraction of his total work.19 This work, nearly all portraits, is now in private collections in the United States, England, and Europe, and in institutions such as the International Museum of Photography at the George Eastman House, Rochester, New York, the Royal Photographic Society in London, the Gernsheim Collection in the University of Texas in Austin, and the Kodak Museum in Harrow, England.

A principal difficulty in the definition of Claudet's photographic style centers on the problem of determining how
much work in a Claudet-labelled case was actually done by Claudet himself. The problem is by no means unique to Claudet, for we know that most studio owners employed assistants. Thomas Sutton, in an account of his visit to Claudet's first studio in 1841, reports that: "...an assistant, a mere youth, prepared and developed the plate," while, we assume, Claudet posed the subject and made the exposures. Later on, however, assistants operated the cameras, too.

From 1847 to 1851 Claudet ran two photographic galleries, one at 18 King William Street and another at the Colosseum. Although it is likely that he supervised the products of both studios, it is obvious that many daguerreotypes with a Claudet label were made during this time by someone other than Claudet himself. From late 1846 until March 1847, the photographer John Mayall assisted Claudet and, sometime after Mayall left to open his own gallery, he was replaced by T. R. Williams, who apprenticed with Claudet until 1849 or 1850. Much later, during the 1860s, Antoine's son Henry, who took over his father's business after his death, worked at Claudet's last gallery at 107 Regent Street.

Despite these obstacles of authorship and scattered and missing work, however, a style that is identifiable as the work of Antoine Claudet's does emerge. This style can be identified in formative, mature and late stages, as certain characteristics appear and develop in his work regardless of changes in apprentices.

A convenient means of roughly dating Claudet's work is provided by the gallery case stamps, which British and European photographers often used to identify their work. It is reasonable to assume that work from a later gallery represents a development or at least a continuation of work from the previous gallery.

Claudet's work falls into three chronological periods:

<table>
<thead>
<tr>
<th>Period</th>
<th>Gallery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1841-1847</td>
<td>The Adelaide Gallery</td>
</tr>
<tr>
<td>1847-1851</td>
<td>18 King William Street and the Colosseum</td>
</tr>
</tbody>
</table>
The largest group of surviving work dates from the 107 Regent Street period and is comprised mostly of stereo daguerreotypes. Work from the Adelaide Gallery and the middle period is largely single daguerreotypes and totals nearly half of the surviving late work. 22

*****.

As a portrait photographer Claudet sought to combine certain 19th-century concepts of beauty and portrait conventions with the clarity and truth to reality that the camera lens could impart. As he made portraits he was not merely recording the appearance of an individual. He was also working to build an illusion of reality by merging and defining the subject's identity with the studio environment of costume, props and paintings. His portraits conveyed many generally accepted 19th-century values of class, beauty and refinement.

In addition his scientific interests, his respect for the technical aspects of photography and all its potentialities, called for a faithfulness to the facts of experience within the portrait. Sharpness of focus and clarity of form in a well-defined three-dimensional space are distinctive characteristics of his work. Claudet's admiration for the underlying principles of photography led him to exclaim in 1862:

Have you ever understood what is photography?
Have you studied the beautiful and unerring principles upon which it is based? If you had, the most imperfect photographic production would be a source of admiration to you... 23

And he simultaneously argued for the photographic product in all its potential for perfection and for its unique capacity for verisimilitude:

In fact, photography, which can represent the cylindrical curve of a marble column, or the roundness of an ivory ball, only by means of an almost imperceptible gradation of tint, can also
by the same means delineate the softness of youth and grace with a perfection which no painter is able to approach by the most delicate touches of his brush.

One of Claudet's most familiar and beautiful works, "The Geography Lesson" (1851), provides an excellent example of his mature style. This stereo daguerreotype, now in the Gernsheim Collection in Texas, represents one of Claudet's earliest ventures into the world of stereography. It is no coincidence that Claudet's mature style appears at about the same time that he became enamoured with the stereo, for stereography in its illusionary depiction of objects in depth, became the scientific and technological refinement which aided the artist.

In using the theme of "The Geography Lesson" Claudet was borrowing a subject popular among painters and even some photographers at the time. This genre motif was not new; it is found in two paintings by the 18th-century Venetian artist, Pietro Longhi. By choosing such a theme, Claudet was consciously relating his photographic study to painting.

In "The Geography Lesson" a tutor, who strongly resembles Claudet's son, is posed with five young girls. The image conveys Victorian values in regard to adult/child, male/female relationships and the position of England as a world power. The man stands central and tall with his hand upon the globe, the miniature world, while the young girls cluster about their male tutor for instruction. Acting almost as a stage director, Claudet demonstrates in the distribution of figures his talent for building depth and emphasizing the sculptural qualities of the objects themselves. Leading into the parlour scene is a book open to a picture of a classical monument. Slanted towards the viewer and tilted up, its size exaggerated by its proximity to the lens, the book draws one into the world of the parlour lesson. By placing a much smaller book on the same axis farther back, Claudet creates an illusion of a vast distance between fore and middle ground. Along the same axis and central to the
image is the globe. Around it the six figures in Claudet's tableau vivant, in a delightful array of poses, form a loosely defined circle, their gestures or the position of their heads and arms forming a flowing visual pattern in depth. Defining the limits of the parlour space are a curtain and mirror, the latter reflecting the head of one of the girls and a portion of the globe. The use of mirrors and other accessories as props is consistent with Claudet's conception of group portraiture as a staged three-dimensional event.

In this work Claudet exploited stereography's potential for evoking the third dimension so well that even his contemporaries were amazed:

...In one, as many as six full-length figures, the distinctness and roundness of which is so life-like as to be almost startling; and so instantaneous is the process by which the pictures are taken, that even a number of children, difficult as it is to get them to sit steady, may be taken at once.  

Claudet's handling of light contributed as well to the convincing three-dimensional effect. Light falls on the girls' dresses enhancing the plasticity of their folds. The gentle character of the light defines each figure and object and because of its uniformity relates all the forms in space. Claudet seems to have understood clearly that modulated light forms the third dimension while strong contrasts tend to flatten and obscure three-dimensional form.

Claudet's contemporaries recognized and appreciated these subtle light effects which induced the third dimension in his portraits, and were curious about his technique. In two articles published in 1846 Claudet's system of modelling is described as a hand-held screening method:

Mr. Claudet employs also hand-screens to modify the reflecting powers of the face, hands, white portions of the dress, and etc., so as to induce equable action, and to produce the full effects of natural relief.
And in another journal during the same week:

"By an ingenious contrivance in screening the light during the time of sitting for the picture, Mr. Claudet is enabled to modify various effects of light and shade on the face, by this means displaying the features in their natural relief..."

To avoid strong contrasts Claudet, indeed, had developed a technique of screening or holding back light in the brightest areas by partially covering them during exposure. Another modelling technique involved the use of black velvet screens as described below:

Mr. Claudet...explained the means adopted by himself to modify the light. This he effects by screens of black velvet, regulating its power as may be desirable. Of the results of his method we had opportunities of judging in one or two portraits which were more characteristic, round, substantial, and lifelike than any of the Daguerréotype productions we have ever seen. The heads were lighted in a manner to give them the utmost force and, moreover, their general effect was most pleasing.

In the mid-1840s, when one of the most common problems of daguerreotypy was harshness in the reproduction of light effects, Claudet worked inventively to achieve subtle lighting in his portraits.
My experience of matters photographic dates from the year 1841, and therefore from shortly after the discovery of the new art-science. In that year I remember having my Daguerreotype portrait taken by Mr. Claudet, on the roof of the Adelaide Gallery. I was seated, one sultry summer afternoon, at about three o'clock, in the full blazing sunshine, and after an exposure of about a minute the plate was developed, and fixed with hypo. My eyes were made to stare steadily at the light until the tears streamed from them, and the portrait was, of course a caricature. It has since faded. I paid a guinea for it. M. Claudet himself superintended the pose, and an assistant, a mere youth, prepared and developed the plate. There was on the roof of the building a studio of blue glass, the use of which had been abandoned because the blue glass was not found to shorten the exposure; so I was posed outside...29

No discussion of Claudet would be complete without including this familiar reminiscence by Thomas Sutton. It is especially interesting because Claudet's gallery could not have been open for more than a month or two when Sutton made his visit. From this account it is evident that Claudet initially photographed his subjects in open air and even in direct sunlight. Nearly a year later, a contemporary journalist related his experience at the Adelaide Gallery:

The roof of the Adelaide Gallery is the scene of these operations; on which a chamber glazed with blue glass is erected, for use in cold and rainy weather; when it is fine, the sitter is placed in the open air under an awning to screen the face from the glare of sunlight. Waiting your turn, and whiling away the time by trying to discern distant objects through the smoke, or looking at the steeple of St. Martin's Church, that rises in bold relief before you, a courteous person invites your attention to a little square box that he holds; and placing it on a stand directly opposite to you, begs you to remain steady for an instant. He lifts up the little
dark curtain that veils one side of the cube-shaped box, and lets it drop directly: you suppose there is something wrong - not at all - the thing is done whatever your look was at that moment, it is trans-fixed on the plate; and you may go to the little laboratory where the process of "fixing" is performed, and, as the moisture of the preparation is evaporated from the surface, see what was the precise expression on your face at the time. There is your image, as though a diminishing-glass had perpetuated the reflection, only without colour. But what a hand! Surely you have not got such a huge fist: no; you happened to thrust it forward before the plane of the picture, and hence it has been taken under a different angle. 'You don't like to present a portrait with such a fist to the fair one to whom you have offered your hand; and you hesitate, though the likeness is so striking: M. Claudet perceives your embarrassment, and anticipating the objection, says, "Let us try again, if you please"; and the operation is repeated - ay, and a third time, if any accidental failure renders it necessary. Should you prefer it, a friend may share the operation; and at the same moment both phizzes will be transferred to the plate: we saw a loving couple taken in this way, nay even groups of three. You may have a whole family enclosed in a couple of miniatures.30

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Unlike D. O. Hill or Daguerre, Claudet had had no previous training as a painter; instead, his business was making, selling and importing glass. When in the early summer of 1841 he opened his portrait gallery on Adelaide Street, however, he was well aware of the portrait tradition in painting.

The earliest existing daguerreotypes by Claudet indicate a familiarity with the branch of portraiture called miniature painting or "limning." These tiny "keepsake" paintings tended to depict a formally posed subject with some suggestion of background - curtains, drapery, architecture, nature. With this tradition in mind, Claudet placed his subjects either seated or standing in front of a painting background. He patented this idea in December, 1841, and described the significance of the painted set for portraiture in his patent
specifications:

In reference to the third part of my Invention, I may state that when the daguerreotype process was originally applied to portrait taking, it was necessary to place behind the sitter some plain backgrounds of neutral tints in order that the outlines of the figures should be delineated and brought out. I have now improved this by applying behind the sitter some backgrounds of painted scenery representing landscapes, interiors of apartments, and other representations adapted to the taste and habits of the sitter or to his profession. The advantages of such background scenes is obvious, for they give to the portrait an effect quite pictorial. Besides,'I can at will place the sitter, according to the colour of his dress, complexion, or hair, either against a dark or a light part of the subject painted upon the background scene. I can also vary the scenery by the combination of several backgrounds, shifting one upon the other like theatrical decorations, and by placing, nearly on the same plane where the sitter is, such subjects as could not be correctly introduced in a daguerreotype portrait, as the daguerreotype process does not represent the correct images of any objects but those placed nearly at the same focus. 31

As Claudet pointed out, besides the pictorial effect that he felt the painted backdrop added to a portrait, the painted set also allowed the rendition of objects that could not actually be included because of the technical restrictions of depth of field placed on photographers by slow exposure times. Thus, in order to render objects in depth Claudet had to resort to a painted image. Although the result of placing a subject against a backdrop was sometimes (paradoxically) spatially limiting in effect, the use of a painted set may be seen as Claudet's first attempt to introduce depth into his portraits.

At the beginning of his photographic career Claudet used a variety of painted sets. For example, the background for a young military officer in "Colour-Sergeant, Coldstream Guards," is a painted formal garden. The same set can be
found in the portrait of a young woman with a bonnet in a London collection. Another painted landscape forms a background for George Houghton, Claudet's business partner, who sits rigidly and looks seriously off to the side, while in another portrait a distinguished looking man, perhaps a lawyer, is seated before a wall of painted books. In these instances, although the painted set suggests a make-believe depth with its painted objects in space, in effect the set limits pictorial depth by providing only a narrow proscenium in which the subject sits or stands.

In the portrait of the bonnetted young woman the subject is relaxed and visually related to the background space, for she leans on an actual stone pedestal similar to the painted one in the set. The combination of the woman's off-balance pose and her near-smiling expression gives to this portrait an animation that contrasts with the frozen attitudes of the officer and the two seated men.

These four daguerreotype portraits share stylistic elements beyond the use of painted sets. Lighting is flat and, with the exception of the young woman, the poses are stiff and frontal with expressions frozen in serious stares. Evidence of light coloring on the "Colour-Sergeant..." daguerreotype suggest it was made after the late spring of 1843, for ads for color daguerreotypes by Claudet did not appear until May of that year. Although the other portraits have no suggestion of coloring their similarity in style to the "Colour-Sergeant..." indicate they were made at approximately the same time or slightly earlier.

The use of painted backgrounds was widely applauded at the time. A writer for The Spectator compared the effect to engravings:

The addition of a background of trees, architecture, or a library, takes away from the metallic effect of the plate; and gives to the miniature the appearance of an exquisitely finished mezzotint engraving seen
through the wrong end of an opera glass. 33

The Art-Union similarly praised the effects achieved by Claudet's use of painted sets:

Unwearied experiment has astonishingly improved the knowledge of the application of the Daguerreotype to portraiture. We can not help remarking this from some specimens publicly exhibited by M. Claudet; yet, viewing the discovery and its capabilities in the same light in which it appeared in its earliest state, the general complaint against these portraits has been their extreme coldness in tone: this defect, however, Mr. Claudet has succeeded in obviating, by great improvement in the management of the background, which cannot fail to augment the popularity of these portraits.34

Both writers praise the use of painted backgrounds for the warm, softening effect they seemed to give to the cold, metallic tones of the daguerreotype plate. Despite the somewhat artificial and often distracting effect these painted sets caused, their popularity continued throughout the 19th century because they established an actual connection to the painted portraits that the daguerreotype was imitating.

A fascinating Claudet portrait, now in a London collection, is that of an unidentified seated young man. No painted set is used here; instead, Claudet constructs the portrait like a still life, with curtains, a painting on the wall, and a table upon which rests the man's tophat. Everything, including the man's pose, is arranged carefully with an obvious concern for spatial clarity and effect. Whereas in earlier works the sitter's frontal pose limited the possibilities for sculptural definition, here more advantage of the third dimension can be taken as the man is photographed seated in a full-length, three-quarter position.

Although probably taken about seven years earlier, this portrait contains some compositional elements and ideas that make it a prototype of "The Geography Lesson." The painting has
been replaced by a mirror in the latter work, but both in conjunction with the curtains at left fix the far boundaries of the picture space. In addition the tiny painting on the wall with its own perspective exaggerates the illusion of depth, just as the device of the two books in "The Geography Lesson" exploits pictorial depth. And like the open book in the later work, the wall painting presents the playful illusion of a picture within a picture. Finally, the tophat becomes tangible, concrete and sculptural - much as the globe in "The Geography Lesson." In the later work these ideas are developed and expanded, and gone is the stiffness and awkwardness of the posed man; however, the portrait indicates in a primitive manner the spatial concerns that were to become the hallmark of Claudet's style.

One last point about this portrait of the young man: the highly distinctive chair in which he sits can be found in several Claudet daguerreotypes and is prominent in a number of his calotype portraits. In fact the chair, table with drape, and curtain form the set for a group of calotype portraits taken by Claudet in 1844. During that year Claudet corresponded with Fox Talbot about several of the portraits in that group. Because of the identical sets, and because of some stylistic similarities, it is likely that the daguerreotype portrait of the young man was made at about the same time as these calotypes.

Most of the calotype figures are photographed seated, full-length and there exists a clear indication of spatial concerns. In a calotype of a woman reading, for example, sculptural form is emphasized by the woman's position in the chair; she sits on its outer edge, and angles her body away from the direction of the chair. Instead of remaining distinct and separate entities, as in the daguerreotype, volumes flow into other volumes and linear patterns are created. The drapery leads to the chair back and the full folds of the woman's skirt, while the woman's free arm completes visually the other arm of the chair. Visual relationships such as these are not evident in the daguerreotype portrait, but they do become apparent in Claudet's later work.
Claudet's best known daguerreotype using a painted set is his portrait of William Henry Fox Talbot. There are at least three slightly different versions of this portrait in existence: one at the Royal Photographic Society in London and two at the Fox Talbot Museum at Lacock, England.

All three portraits are remarkably similar. Talbot is seated looking to the right, with a landscape background of trees and a river winding back into distant hills. It is clear that Claudet wanted to capture two aspects of Talbot's personality in the portrait. The landscape set suggests Talbot's love of nature and the half-open book Talbot holds in his hand recalls his scholarly interests.

The image is rather limited spatially and lighting is flat, although the winding river and vista beyond the trees opens up the picture space where other sets did not. The outline of the trees, which follows the triangular form of Talbot, establishes a pleasant two-dimensional design. Heavy gold toning adds warmth and a degree of coloring to the portraits.

Slight variations in the three daguerreotypes result from Talbot's expression, posture and the position of the book. Talbot's pose moves from frontal to almost full three-quarter, and as his body moves his expression changes from relaxed (with an element of mild surprise) to pensive and then to stern. Unfortunately there is no mention in any of the known correspondence between Talbot and Claudet of these portraits, but they were probably made between 1842 and 1843.

By the fall of 1843 Claudet was highly pleased with the results of his daguerreotype portraits. The previous March he had spent time with Lerebours in Paris and made contact with Hippolyte Fizeau, the young physicist who had perfected a method for reproducing daguerreotypes by a photo-etching process. Returning to London, Claudet obtained an English patent for Fizeau's process in November, 1843. Claudet also brought back from Europe a new Petzval lens which gave excellent definition even at widest aperture and was in effect twenty times faster than
other portrait lenses. Showing his obvious satisfaction and a strong sense of his role as an artist/photographer, Claudet wrote to Talbot in October 1843:

Since my return from Paris, I have worked very hard on my art and have brought it to a point of great perfection. I am now making truly admirable portraits. I am proving that it is possible not only to make portraits that are a good likeness, but also to make them pleasing. It is necessary to redeem the reputation of the daguerreotype which has suffered so much from the first abominable attempts which were initially thrown at the public. In this regard I am no more exempt from reproach than all the others and I am really embarrassed when I look at my first productions. 36

Claudet added the thought that he would like Talbot to see these new daguerreotypes and offered to send him some examples.

It is likely that Claudet did send some daguerreotypes to Talbot at this time, for in the Talbot family collection there are several Adelaide Gallery portraits similar in style to each other and to another dated portrait - that of Andrew Pritchard, in the Victoria and Albert Museum, London, which has etched in the glass "18 July 1843."

The principal characteristic these portraits share is the lack of a painted background. After his initial enthusiasm, Claudet seemed to become disenchanted, beginning with these late 1843 portraits, with the painted set for single portraits. Instead, simplicity dominates the images. By eliminating the painted set Claudet removed the background distraction such a set so often caused. Occasionally the plain background is alleviated by drapery off to one side, but most often the background space remains empty, unarticulated. Perhaps Claudet's abandonment of the painted set for single portraits relates to his comment to Talbot about his embarrassment over his first portraits.

The subjects are now all seated and photographed from waist or chest up in a three-quarter pose, looking either to the
side or directly at the camera. Frequently the subject brings hand to face and, although the original reason for the pose was to keep the head steady during long exposures, it is possible that its appearance with shorter exposures indicates the popularity of the pose. Andrew Pritchard, whose hand is beautifully lit and positioned, assumes this pose in the 1843 portrait.

Since Claudet had written to Talbot that he was now able to produce a portrait that was not just a likeness, but pleasing to the eye as well, it is interesting to note that at no other period in Claudet's work does the identity of the sitter emerge more clearly than in these portraits. Personalities come forward with an intimate and unpretentious directness. Pritchard's furrowed brow and intense stare contrast strongly with the coy smile and furtive glance of an anonymous young lady in a private London collection and the warm, relaxed smile of the man with a checkered tie in the Gernsheim Collection. In later works (after c.1846) Claudet would submerge personalities in statements on social status or in attempts to capture a sense of ideal beauty.

Claudet's use of light in the late 1843 group reveals an understanding and ability that was lacking in the earliest works. Replacing the flat lighting of the 1841-42 portraits is a subtle, modelled light that produced a sculptural effect. Evidence of Claudet's control can be found in the portrait of an anonymous young man in the Talbot family collection: light models the man's hand and face with an artistry that suggests Nadar.

During the early 1840s Claudet was influenced to some extent by certain conventions well-established in miniature painting. He successfully made his early portraits conform to those modes, but he was searching for a personal portrait style at the same time. By 1845 he had settled on a style for single portraits, which he used with only small modifications and refinements throughout the 1850s and 1860s.

The style is best represented by the often published "Lady with a Reading Glass," now in a private collection in London.
Although undated, the portrait was probably made around 1845 (the date Gernsheim has also given it) because it is so close in style to another work, a portrait of a young man, which is dated October 23, 1845.

In the portrait of the young lady Claudet manipulates light, form and depth of focus, to create a spatial environment for the subject. No painted set is used, although in the right corner drapery softens the stark studio environment and defines the space behind the woman. By adjusting the focus so that the curtain falls just beyond it Claudet provides soft and loosely defined drapery as a foil for the well-defined features of the woman's face. Caught between the two, unfortunately, is the woman's arm, which extends in some places beyond the field of focus. The curtain and light on its folds give the illusion of space and form behind her. The woman sits in a relaxed manner, tilting her head and resting one arm on the table beside her. In the other hand she holds a reading glass in such a manner that it provides a lead into the composition. Other objects such as a rose, some drapery, a basket of flowers, a hat perform a similar function in later works.

Claudet's portrait presents a poised and charming woman, with a serene expression that is timeless, a characteristic element of Claudet's mature style. He consistently began to identify his patrons with a classical idea of beauty - elegant, detached, devoid of the momentary thought or feeling - after c.1845. In these later portraits, his sitters impress us with their gentility and refinement, not their individuality.

The most striking difference between this portrait and those discussed earlier is that "Lady with a Reading Glass" is hand-tinted. We know that Mansion, the French miniature painter, was working for Claudet by May 1845, but since Claudet had advertised as early as May 1843 that he was able to offer daguerreotype portraits in color, it is likely that between 1843 and 1845 another painter hand-tinted the portraits. The deep, rather opaque coloring of the blue dress, pink
ribbon and red lips of the "Lady with a Reading Glass" are atypical of Mansion's technique; thus it is probable that the portrait was tinted by someone else. The style in which Mansion worked was popular in England during the latter part of the 18th century. Using pastel colors and thin pigments, he preferred a lighter and more transparent effect to the heavy opaque quality that was popular in miniature painting in England at the time. The thinner pigments were much more suitable for tinting photographic portraits; the soft, luminous suggestion of natural colors produced by Mansion combined so beautifully with the underlying tonal gradations of the camera that painting and photography seemed like one.

Claudet's style had matured in five years from primitive attempts in 1841-42 merely to obtain a likeness to an ability by 1845 to control figures, space and lighting to make a pleasing pictorial statement. As a writer exclaimed upon visiting Claudet's daguerreotype studio in 1846:

"The mind of an artist had been at work, though his hand was inert. The conditions of light, of position, and to some extent, of costume, had been studied, with reference to the individuality of each original; and thus each was imaged under picturesque circumstances, instead of - as ordinarily we have found it - under circumstances which, if not adverse, could not contribute, to the production of a picture..."
Calotype Portraits

In January 1842 Claudet and William Henry Fox Talbot began a correspondance that continued sporadically throughout Claudet's lifetime. At the beginning (and in the last years) their letters dealt mainly with methods of reproduction photography: electrotyping and photo-engraving. Claudet sent Talbot electrotype specimens of some of his daguerreotypes, and even ordered a daguerreotype camera for him through Lerebours.

In October of 1842 Talbot asked Claudet if he would be interested in practicing the calotype at the Adelaide Gallery. Talbot had patented his process in England in February 1841, so no one could make calotypes without Talbot's sanction. Talbot had already granted a license to Henry Collen, the painter of miniature portraits who had operated a gallery for a while. When Collen closed his portrait studio, Talbot asked Claudet if he would consider making an arrangement with him to use the calotype.

Claudet agreed, anticipating that the terms governing his use of Talbot's process would be settled quickly; however, over a year and a half of negotiations passed before an agreement was reached. When negotiations began, Claudet was very enthusiastic about making portraits with the the paper process. In November 1842, while in Paris, he sought out a friend who manufactured paper to make "proper paper" for the calotype. In addition he wanted to examine the work of Bayard and others in France, and had brought with him several of Talbot's prints to show the French photographers.

There were several issues about which Talbot and Claudet disagreed, however. In the beginning Talbot wanted one-third a share of all Claudet's profits from the sale of calotypes, but Claudet convinced him that 25% was more reasonable. It was necessary to decide upon a minimum price for portraits; this was established at ten shillings six pence for the first print and five shillings for duplicates. At first Talbot wanted to
retain the right to grant licenses to artists and amateurs, to those wishing to photograph non-portrait subjects such as landscapes and buildings. Claudet objected; he feared that if people were allowed to make calotypes at all, they might also take portraits, and there would be no way to stop them from infringing on his license.

The major point of contention, however, was Talbot's insistence on the guarantee of a fixed yearly minimum amount; if unmet, Talbot then wanted to be able to grant other professional licenses. This remained an issue for over a year. Talbot wanted to set the minimum at £400; Claudet, well aware that at that time the calotype held little interest as a portrait medium for the general public, refused. Instead, he suggested no minimum for the first year and £250 for the second. Pointing to his experience with the daguerreotype, Claudet said his expenses during the first two years would be high. Not only would he be striving to master the process, but public opinion would have to be brought around to favor the calotype, and the public was unpredictable.

By the summer of 1844 their differences were settled and by August an agreement had been signed. Claudet received instruction in the new process from Nicholaas Henneman, Talbot's assistant. The final terms of their agreement are not known because their contract did not survive with Talbot's other papers.

On August 20, 1844, Claudet wrote Talbot that he had made much progress with the calotype, that he had produced some beautiful specimens on 8½ x 6½-inch paper, and that he was sending along some examples. He sent a self-portrait and a portrait of George Pritchard, the British Consul in Tahiti, wearing his sword and uniform:

The portrait with the sword and consul's outfit is that of Pritchard. He came to have a Daguerreotype made and we took advantage of the occasion to make a Talbotype. The negative
is very beautiful and we obtained three beautiful copies. The [illegible] is after nature and I believe you will be satisfied with it. \textsuperscript{39}

Claudet's description of Pritchard's portrait is especially interesting because this portrait, along with seven others, has survived and is now in the Science Museum in London. Claudet's satisfaction with the portrait of Pritchard can perhaps best be attributed to his initial pride in getting results with the new process. It is clear in comparing Pritchard's portrait with Claudet's daguerreotype portraits taken around the same time that the calotype lacks the subtlety and control of the daguerreotypes, not to mention the unflattering nature of Pritchard's stern, squinting expression. Even Claudet's earliest daguerreotypes contain a charm the first calotypes lack.

The calotype process was slower than the daguerreotype; exposures could run over a minute. Claudet had reduced his exposures to 25 seconds on an overcast day, but he still remained dissatisfied:

Until we can operate with the Talbotype in several seconds and as rapidly with it as the Daguerreotype so that one can get more pleasing poses, then I say that the advantage is on the side of the Daguerreotype.\textsuperscript{40}

From the beginning Claudet preferred the daguerreotype to the calotype. Aesthetically he found the daguerreotype far more satisfactory in the precise rendering of detail, wider tonal range, and the sharpness and clarity the silvered surface could yield. In August 1844, he wrote Talbot:

Until we have a paper with a surface as uniform and perfect as a silver plate I say that the Daguerreotype gives images more delicate, finer and of greater perfection than the Talbotype.\textsuperscript{41}
Claudet hoped to obtain an ideal paper for the calotype, but for the moment he advocated full-plate size calotypes because the texture of the paper was less obvious:

All our attempts are being made on large portraits; I believe that this is the most satisfactory size for the Talbotype, because the defects of the paper texture are less apparent.\textsuperscript{42}

![Fig. 1. Calotype self-portrait by Claudet, August, 1844.](image)

It is clear that Claudet never felt as comfortable with the calotype as with the daguerreotype process. It has been suggested that he had difficulty mastering Talbot's process,
but that would be surprising in view of his technical abilities. However, that argument is bolstered by the details of the Spring Rice incident.

In late August 1844, Stephen Spring Rice, an influential government official, came to the Adelaide Gallery for a calotype portrait. Claudet made three attempts. The first time the sun was so strong that Spring Rice could not stand the glare. They waited a long time for a cloud and then made a 25-second exposure, but the negative had spots on it and Claudet invited Spring Rice to come back another day. When Spring Rice returned the sky was overcast, but Claudet made a negative anyway that, judging from a letter Claudet soon received from Spring Rice, was unacceptable:

"Today to my great surprise I received a letter 'fort peu polie' in which he [Spring Rice] said: 'Mr. Spring Rice having received a letter from Mr. Fox Talbot stating that nothing is easier than to obtain a good portrait by his process in 5 or 6 seconds, Mr. Spring Rice thinks that the most favorable interpretation of the repeated failures at the Adelaide Gallery is that the operator does not understand the process. He will not therefore trouble that person to make another attempt.' 43

Talbot's exposures often lasted a minute or more and 25 seconds was a remarkably short calotype exposure. Apparently Claudet had also tried to interest Spring Rice in having his portrait done in daguerreotype and had given him his views on the merits of the two processes. Claudet must have communicated his preference for the daguerreotype, because in his next letter he found it necessary to reassure Talbot that he was not neglecting the calotype:

"He [Spring Rice] would have written you no doubt and given you the idea that I am neglecting the Talbotype and that I value the Daguerreotype to the detriment of your procedure. I assure you that there is nothing to that. I have taken up the Talbotype with the intention of making it flourish and I will not
By November Claudet was prepared to make 40 calotype negatives a day, but it is unlikely that such volume was ever reached.

Murray [Claudet's assistant] is a little slow and he needs to be pushed often, but I will soon accustom him to my system which is to work without stopping. I make him tremble when I tell him of making 40 negatives a day, but as this is the only way of mastering the process, it will be necessary for good weather to arrive at this number.

The only surviving calotypes that can now be clearly attributed to Claudet are in the Talbot collections at the Science Museum and the Talbot Museum at Lacock. They consist of two calotype prints of George Pritchard, one small self-portrait, and one 6½ x 8½-inch print of a young woman reading. In addition there are four 6½ x 8½-inch calotype negatives: a girl sewing, an older woman who resembles Claudet's wife, a woman holding a child, and another self-portrait. One other negative of a man writing at a table is very likely by Claudet. We know the Pritchard portrait was taken around mid-August 1844, and the others were probably taken at the end of that month. Some may be the ones Claudet described when he proudly wrote Talbot that he was sending him several large portraits:

I have not seen portraits as perfect not by Mr. Henneman nor by any other operator. These portraits have eyes and costumes—everything has come out....I am not sending you the best copies of the portraits for fear of their being damaged but they will suffice for you to judge.

All these calotypes, similar in style, are quite unlike Talbot's work. Their attribution to Claudet rests primarily on the highly distinctive chair in which all the subjects sit. The chair, identified from the Pritchard portrait, can also be
found in several Claudet daguerreotypes. Only in the portrait of the man writing is the chair absent; however, this could be easily explained in that the large arms of the familiar chair obstructed the view of the man in the act of writing. In order to present the writing idea Claudet probably replaced the chair with a small, armless one that would be less obtrusive.

Taken as a group these calotypes are less successful than the daguerreotypes produced at the Adelaide Gallery. Long exposure times required by the calotype made it necessary for the subjects to be formally posed in the act of doing something—reading, writing, sewing. Absorbed in their activity, the subjects appear to have their eyes shut. Lighting is generally severe and strong shadows are evident in many portraits. The calotype did not yield as wide a tonal range as the daguerreotype, nor did it produce the same deep blacks and strong highlights. Claudet attempted to enhance the contrast by printing two negatives simultaneously. In this way he felt he could not only "accentuate the effect of the whites and the blacks of the negative but also at the same time neutralize the defects of the paper." 47

Whereas Hill and Adamson saw the very life of the calotype in its rough surface and lack of detail, Claudet regarded all these as faults of the process that should be remedied. Hill and Adamson exploited the unevenness of texture and broad tones to advantage; Claudet was forever at war with them. He could no more allow a form to be obscured by a large patch of shade than he could say an unkind word about Queen Victoria. In addition Hill and Adamson's elaborately planned snapshot approach was more suitable to the process than Claudet's highly ordered and formal portraits.

One of Claudet's most successful calotypes is the portrait of the woman who resembles his wife. The pose is more typical of the daguerreotype poses. Her body faces one direction, while her head is turned to the opposite side. Lighting is subtle rather than severe, and one senses Claudet's control over the
rendering of sculptural form.

Despite Claudet's apparent lack of mastery of the calotype, he was, it appears, successful in making it appeal to the public. In May 1845, articles in The Art-Union and the Literary Gazette praised the results of Claudet's work with the Talbotype and urged their readers to visit his gallery. They mentioned specifically Mansion's hand-tinting:

"No human hand has ever obtained such brilliant effects as these, which result from the combined labours of nature and art."

Claudet persisted with the calotype process throughout the 1840s; as late as February 1853, he wrote to Talbot that he was planning to devote much time to the Talbotype:

"When good weather returns I am going to devote myself enthusiastically to experiments with the Talbotype of which the applications are so appreciated and which has such a beautiful future."

However, these words may have been more of a courtesy to Talbot than an accurate statement of fact, for at that time Claudet was almost completely involved with stereo daguerreotypy.
Junction of William IV Street and Adelaide Street, 1939 photograph.

Floor plan of buildings on Adelaide Street and King William IV Street. (Dots represent 18 King William Street and The Royal Adelaide Gallery of Practical Science).
It is very likely that Claudet's move from the Adelaide Gallery to 18 King William Street involved a change of entrance and address, but not a different studio. The Adelaide Gallery on 7 Adelaide Street was only one or two doors down from 18 King William Street, a rounded building on the corner of Adelaide Street. A photograph taken in 1939 of King William Street (now William IV Street) and Adelaide Street shows that the two buildings could have had access to the same roof. The new address, without an actual move, would benefit Claudet by providing an address and entrance separate from the Royal Adelaide Gallery of Practical Science.

The change of Claudet's label on the daguerreotype cases from "Claudet's Daguerreotype Process, Adelaide Gallery Strand" to "18 King William Street, Strand and Colosseum, Claudet's Daguerreotype," allows more precise dating of his work. In the London Postal Directories, under "Artists," an "Anthony Claudet" is listed at 18 King William Street from 1848 through 1851. These directories were generally six months to one year behind, so we can assume that Claudet moved into 18 King William Street in 1847 and remained until 1851.

Claudet had opened a second gallery at the Colosseum in Regent's Park by June 1847, and this gallery was maintained until sometime in 1851. It was during this period that T. R. Williams apprenticed with Claudet; John E. Mayall had assisted in his studios from 1846 to spring 1847.

Since it is between 1845 and 1851 that Claudet's style matured, it is unfortunate that so few portraits made during this period have survived. There is no distinct stylistic change between the late Adelaide Gallery and early 18 King William Street work. In fact, one Adelaide Gallery-cased portrait of a woman in the Houghton family is so similar in style and used the same set as several 18 King William Street portraits that it is further evidence Claudet did not move his studio.
None of the 18 King William Street portraits have painted backgrounds; in the majority figures are placed against a plain gray ground. Lighting is gentle, but definitive. As the King William Street years progress, subjects appear more relaxed. Tension is created by composition - by an opposition of shoulders and head or by the buildup of horizontal and vertical forms, and not by the stiffness of the model.

In most of these portraits the directness characteristic of earlier work is preserved and combined with a stronger overall presentation. Poses are broader, photographed either from the knees or from the waist. A trait of the 18 King William Street style is tight cropping; the subject fills more of the frame. Within this more constricted space the sense of three-dimensional forms remains, provided mainly by the positioning of shoulders, head, arms and torso. At this time Claudet looked for expressions that were animated, yet somewhat aloof; he blended the earlier, more individualistic expressions with the impersonal and serene gazes of later works. Tight cropping combined with a direct, engaging expression gives most of these personalities a strong sense of presence and a robustness that is especially evident in two portraits at the Royal Photographic Society in London - that of John Flight and another of an anonymous man. In both works figures fill the frame with a cool forcefulness reminiscent of portraits by Ingres.

It is likely that Claudet was aware of Ingres' work, since he was the most sought after portrait painter of his day. A near contemporary and a compatriot, Ingres was 17 years older than Claudet, but both died in the same year - 1867. Paintings by Ingres were exhibited at Paris Salons when Claudet was living in Choisy-le-Roi, only a few miles from Paris. In addition Claudet made several trips from London to Paris; visits in 1839, 1843, and 1846 are documented. In 1846 Ingres had a huge exhibition (11 paintings including the "Comtesse d'Haussonville") in Paris at the Galerie des Beaux-Arts. 52
Several works from the 18 King William Street period bear a resemblance to Ingres' portraits of the 1830s and 1840s. Claudet may have been influenced to some extent by Ingres' work, although there is no hard evidence to support such a theory. (It is also likely that Ingres knew of Claudet's work in portraiture. Aaron Scharf suggests that Ingres used daguerreotypes in his portrait commissions, citing as evidence the curious reversal of images, the use of cool metallic colors and his employment of the common early photographic pose in which the hand steadies the head. These characteristics appear in Ingres' work from 1841 on.)

A Claudet daguerreotype that recalls Ingres' work of the 1840s and 1850s is an anonymous lady in the Gernsheim Collection in Texas. Hand-tinted in Mansion's style, the portrait was probably done about 1850. Elegant in manner and dress, the woman is resplendent in jewelry and fabric. Her cool blue dress is highlighted with rose; her bodice jewelry and hat are gold-trimmed. Like Ingres, Claudet shows a love of accessories and the rich details of life—of costume, room and decor. Later on in the 1850s Claudet expands this theme by emphasizing drapery, fringes, ruffles, pillow tassles, etc. for their precious and intricate forms.

Above all it is the total presentation of the woman that is so reminiscent of Ingres. Looking straight at the camera, the woman's expression combines a directness and reserve characteristic of Ingres' portraits. Claudet's woman has the presence of Ingres' "Louis-Francois Bertin" (1832) or "Comtesse d'Haussonville" (1845), but is even closer in spirit and in pose to his later "Madame Moitessier Seated" (1856). By 1851 Claudet had begun to include mirrors in some portraits, which might well have been inspired by Ingres' work of the 1840s.

By his contemporaries, however, Claudet was compared to another painter, the English portraitist Anthony Van Dyck:

...Mr. Claudet is the Vandyck of photography—his sitters become persons of distinction...
The elegance and aura of gentility with which Claudet surrounded his subjects became a hallmark of his style and it continued throughout his career. To have its likeness preserved in an environment of aristocracy was very appealing to the newly formed upper-middle class, which felt the need to establish itself. The general perception of this "aristocracy" required its members to eschew public displays of emotion; Claudet's portrait subjects do not smile, grimace or exhibit anything more than detached serenity. Quentin Bell describes how this new middle class tended to over-emphasize manners, gentility and politeness as means of proving and securing its position:

The grand tendency of Victorian art is in the direction of polite feeling. The age was, after all, made by a class which had but recently achieved power and which was in consequence desperately conscious of the need to prove its gentility; an aristocracy would have been neither so gentle or so genteel. To such a class the expression of any sincere emotion is, necessarily, dangerously close to a breach of manners. 54
"The Temple to Photography" (1851-1867)

In 1851 Claudet moved his gallery to a fashionable new location at 107 Regent Street. The rooms were spacious and elaborately decorated; a reception room was dedicated to the history of photography with murals of photography's inventors and allegorical paintings devoted to the history of painting and photography. It took three years to complete the interior as Claudet wished it, but by 1854 his dreams were realized. A contemporary report gives an idea of the scope of Claudet's plans:

M. Claudet's Daguerreotype Gallery in Regent Street has been recently reconstructed by Messrs. Banks & Berry, and decorated with a series of paintings by Mr. Hervieu. The architecture is in the Italian style, very light and elegant; the decorative paintings have been designed to illustrate the history of photography and stereoscopy in a series of allegorical groups very gracefully conceived. Indeed the entire idea is good of thus making a reception room the exponent of the history of the art which attracts its visitors; and all honour is due to M. Claudet for having turned ornamental walls to so useful a purpose. The room is lit by a skylight: the cove immediately beneath it contains fourteen medallion portraits of the inventors and improvers of photography and stereoscopy, with the philosophers and artists who discovered the principles which led to the invention of the two arts. The first being that of Porta, who, about 1590, invented the camera; the last of Wheatstone, who invented in 1838, the stereoscope. The allegorical pictures of Cupidons, shadow forth in a graceful manner the progress of representative Art from its first creation in statuary, to the sister Art of painting, ending with the invention of photography. The commemoration of the discoveries in France and England is effected by graceful tableaux; and the series is completed by other allegorical allusions to the paper, glass, and metal used in the photographic process. The names and achievements of such philosophers as have aided the art from its infancy to its present maturity are exhibited in two "honorary" panels, completing
Here Claudet worked until his death in December 1867. His son Henry took over his father's business; however, the 107 Regent Street gallery was totally destroyed by fire on January 23, 1868.

The year 1851 was a significant one in the life of Claudet. Not only did he move into his new gallery on Regent Street, but it was also in that year that he became passionately committed to stereography. Both factors influenced his work.

Stereography had become popular in England and throughout Europe and the U.S. initially as a result of Queen Victoria's admiration for the medium at the Great Exhibition of 1851. This exhibition was the first and only event to receive full coverage in stereo daguerreotype. The stereoscope had great appeal because it presented the world in a miniature, lifelike, convincingly three-dimensional form.

Based on the principle of binocular vision, stereography is the technique of making two-dimensional images appear three-dimensional. A stereograph is comprised of two slightly dissimilar images of the same scene, taken simultaneously with a stereo camera (a camera with two lenses set about two inches apart) or two separate cameras. When viewed through a stereoscope, an instrument that allows each eye to perceive each scene separately, the images are mentally fused to give the illusion of one three-dimensional scene.

Claudet's commitment to stereography was immediate and profound. Stereography became the perfect vehicle for his previously expressed interest in the plasticity of forms in space. Most of Claudet's portraits from 1851 on are in the stereo format. During this period Claudet's sensitivity to depth and the relationship of forms becomes increasingly obvious in his work.

Fascinated by the potential of stereography, Claudet made technical studies and did photographic experiments to exploit
the possibilities of the new medium. Four stereo daguerreotypes, now in private collections, are especially interesting in that they show Antoine Claudet and his son Frank taking part in a stereo experiment. Claudet sits in a chair in the foreground, while his son stands in the rear. The "focimeter" (an instrument invented by Claudet to determine accurate focus) sits prominently on a table, and a white card with two mysterious sets of numbers is propped up against the table on the floor. The cards contain a large number in inches and a small number at the bottom in feet. The only difference among the four daguerreotypes, aside from slight variations in poses, is the large number on the card. Each stereo contains a different number: 2, 4, 8, 12. It is only when viewed through a stereo-scope that Claudet's purpose in the four stereos with their varying numbers becomes clear. The small number, which remains constant at 22 feet, establishes the subject-to-camera distance. The large numbers represent the distance in inches between the two lenses of the cameras. The larger the number, the greater the distance between the lenses, and the greater the illusion of depth. With the camera lenses only two inches apart, space is compressed and objects appear crammed into a tiny area. With the increased distance between lenses, space opens until, at the 12-inch distance, the room that once seemed closet-sized seems to have expanded to the proportions of a dance hall.

That Claudet applied such technical studies to his portraiture is evident in work of the 1850s. Portraits indicate a new sense of spaciousness - a reflection, no doubt, not only of Claudet's involvement with stereography, but also of his new surroundings. These 107 Regent Street daguerreotypes mirror the elegance and expanse of the new gallery. Furniture, drapery and other accessories assume more important roles within the portrait image and these props are richer, more ornate. Instead of the tight cropping of the late 1840s, later portraits show an opening-up of space around subjects.
Conventions for poses and sets are a part of Claudet's late style. Group portraits gain in popularity and families or couples are posed in what becomes a very familiar parlour scene with table, sofa and chairs arranged in front of a curtained window, drapes parted to reveal the painted sky and vague landscape beyond. Claudet seemed to favor certain conventions for poses - those which increased the spatial interaction between subject and surroundings, but by the early 1850s standard poses for men and women clearly exist.

A typical woman's pose from Claudet's studio in the 1850s can be found in the stereo daguerreotype of Emma Frederica Spencer dated April 28, 1857. This young woman sits graciously upon an ornate sofa, resting one arm against a pillow, while in the other hand she holds a flower. Claudet has arranged the scene - the woman's pose and the accessories - for visual and dramatic appeal.

When photographing men Claudet preferred a more straightforward presentation, as in the stereo daguerreotype of John A. Court Gray. He sits in a straight-back chair, one arm upon a small table, while in the other hand he holds his tophat. The lower part of his body faces one direction, while the upper part establishes a different plane by leaning in the opposite direction. In poses for both men and women hands and the planes they define are important: one hand is often relaxed, the other tense; one remains close to the body and the other extends into space. Objects such as the hat, flower, book, etc., provide a lead into the space of the portrait. Claudet tends to avoid overlapping when it might be confusing so that each figure exists in its own generous and clearly defined space.

One stereo daguerreotype at the George Eastman House clearly illustrates the relationship of Claudet's spatial thinking to stereography. The stereo daguerreotype places Claudet's son Frank and four unidentified young women in a drawing-room setting with props such as a stuffed parrot and a wall painting.
It is the composition of this image that is most interesting, for in its peripheral arrangement of people around the back of the room and the sides of the photograph (as seen upon the ground glass), and in its parallel planes of depth, it gives a startling effect of tangible three-dimensionality even when seen without the aid of the viewer. It is as if Claudet, anticipating the viewer's transformation of the scene, arranged the composition according to the spatial world of stereography. Stereography has reinforced and developed Claudet's already keen sense of depth and the relationship of objects in space.

A similar interest can be seen in the stereo daguerreotype of a Victorian interior. Claudet has photographed a room in a house which is unusual because non-studio and non-portrait daguerreotypes are rare in his work. It appears that Claudet's interest in the subject is primarily spatial; he seems to have made a deliberate arrangement of objects and furniture to enhance the effect of volumes in space. A basket is pulled out from under a table and moved into the foreground, a footstool is carefully placed to the right, another box is opened and books are rotated to create two separate planes. On a small table lace from a sewing basket trails over the edge like the spiraling lemon peels of a Dutch still life. A book is made to stand on end. Each object is arranged so that its space remains distinct, and the light is even and soft. The space of the "Victorian Interior" is both well-defined and contained. Drawn drapes and a statue that stands directly before the window block any extension from the world of the parlour into the street. Here the statue serves a function similar to the mirror's in "The Geography Lesson."

Striking in their simplicity of design are two stereo daguerreotypes that illustrate Claudet's mature work and his plastic approach to photography. One, in the Kodak Museum at Harrow, shows a uniformed young boy standing with his hands upon the back of a chair. The curve of the boy's arm follows that of the chair back to form an s-curve design. Isolated
against a plain gray background and modelled by subtle lighting, the form of the boy in uniform becomes sculpture-like, and this is enhanced by the stone-gray uniform and the serene expression on his face.

Similarly, in the portrait of a young girl at the George Eastman House a classic simplicity prevails in pose, expression and subtle coloring. The pose is gracefully arranged to interact with and define space; lighting is gentle. The young girl's expression, like that of the boy, is timeless in its serenity and lack of emotion.

Characteristic of Claudet's mature style is a tendency to transform a portrait into an abstract pictorial statement. For example, in a stereo daguerreotype of a young boy in the RPS, London (in a folding stereo viewing case patented by Claudet in 1853), the portrait becomes an abstract study of forms in space. Again a chair serves as a prop for the boy to lean on, but this time a mirror, table, and drapery are included, and all of these objects assume the character of independent sculptural elements. The drapery descends from the mirror onto the table and streams upon the floor, while the mirror, placed at an angle to emphasize depth, reflects a perfect profile of the boy. In the use of the mirror this portrait is very similar to Ingres' 1856 painting of Madame Moitessier. Perhaps Claudet had seen the Ingres painting before he photographed the boy; the daguerreotype is unfortunately undated. It is interesting that the portrait is heavily hand-tinted with colors that are richer and deeper than in most of Claudet's portraits. Claudet may have had the deeper tonalities of a painting in mind.

Another aspect of Claudet's mature style evident in this work is the linking of forms to build the final composition. In "The Geography Lesson" this meant the joining of a group of figures around a circular shape - the globe. In "Boy at a Mirror" the composition contains strong vertical and horizontal elements, but chair, arm, mirror and drapery flow, one form into the other, to establish a pattern of movement through depth.
Drapery also serves an important pictorial function in the stereo portrait of an anonymous woman at the Kodak Museum in Harrow. Standing against a chair, the woman holds a white lace scarf, which arrests the eye with its folds. Pencilled on the back of this portrait is the date "1858."

In view of Claudet's fascination with volumes in space, it is not surprising that he became intrigued with a process invented in 1860 by François Willème called "Photo-sculpture." The process was as ingenious as it was curious: photo-sculpture required a special studio consisting of a glass dome with a circular platform in the center surrounded by 24 hidden cameras. The sitter posed on the platform while the 24 exposures were made simultaneously. Slides or transparencies were then made from the negatives, and projected upon a large ground-glass screen behind the block of clay or marble destined to become the sculpture. With a pantograph, an instrument with a stylus on one end and a modelling tool on the other, the sculptor traced the outline of the transparency onto the sculpture block. As the block was rotated, the corresponding slide was projected upon the screen until all 24 views had been transcribed to the block. All that remained was the smoothing and finishing, which was carried out by a professional sculptor.

After much correspondence with Willème and his firm, the Société Générale de Photosculpture de France, Claudet established a branch of that company in London and became its art director. In 1864 Claudet took out his own patent for a new system of photo-sculpture which involved projecting the image directly on the block to be sculpted, dispensing with the large ground-glass screen and the pantograph. He called his idea, "Photo-plastigraphy." Willème's lack of enthusiasm for Claudet's new approach eventually resulted in the severing of Claudet's ties with the French company and, despite Claudet's dreams, little sculpture actually materialized from this process in England. We do know of at least one sculpture Claudet completed with the technique - a bust of George Peabody.
As early as 1841 Claudet had advertised that he was able to take group portraits. In July, 1841, he placed an ad in The Art-Union informing the public of the many possibilities available in group portraiture:

...By this process also Pictures forming groups of three to six persons can be taken, either engaged at tea, cards, chess, or in conversation, affording whole length Family Portraits, or of Friends, arranged in any manner most agreeable to the parties.57

Whether or not many people took advantage of this opportunity is unknown, but the fact that so few group portraits taken prior to 1851 remain may indicate that single portraits were more popular. The earliest surviving group portrait is that of George Houghton, Claudet's partner, his son George and daughter Mary. The portrait, in an unlabelled case, is undoubtedly early (1841-43) with its painted set and rather awkward bunching of people. A later portrait of two little girls identified as Fanny and Josephine Fleury is in an Adelaide Gallery case and is hand-tinted.58 In its lack of attention to depth and use of a painted set, this work shares characteristics with the Houghton portrait, although a paper label inside the daguerreotype bears the date "1848."

Claudet's use of scenes depicting everyday life situations as portrait motifs is typical of an interest expressed by many artists at the time. Painters, in addition to photographers such as Hill and Adamson, Talbot, and Henry Peach Robinson (in his composite photographs), often presented their subjects in conversation or other familiar activities and posed them in an intimate setting. Genre scenes in mid-19th-century English painting were often melodramatic or sentimental; some told morality tales. Certain objects became standard props for both photographers and painters: table, globe, letters, paintings, piano, books, flowers, fruit basket, etc.

Graham Reynolds, in Victorian Painting, relates the upsurge of domesticity as a theme in painting to the strong
influence of the Victorian novel, and continues:

It was in the 1850s and 1860s that the impulse to paint calm domestic scenes reached its peak. At a time when official favour was still directed to the historical, the literary or the exotic, many artists of widely differing attainment and fame felt impelled to paint at least one scene of contemporary life. And Linda Nochlin, noting the great importance attached to middle-class domestic values at mid-century, writes:

So strong was the pull of middle-class domestic values in the mid-nineteenth century that even a reigning monarch, Queen Victoria of England, herself the very epitome of domestic virtue, might be shown in what is essentially a bourgeois home setting in Landseer's well-known painting of her, stripped of all regalia, with husband and child, surrounded by frolicking dogs and dead game, in the cosy parlour of Windsor Castle.

Claudet, trying to capture the patronage of the middle classes, frequently chose a simple domestic theme as a motif for his group portraits. He would arrange his patrons in a little tableau vivant reading a letter, chatting, or sitting in a parlour. In the stereo daguerreotype of Mrs. Glanville and her daughter, Mrs. Spencer, for example, the two women sit upon a sofa appearing to discuss the contents of the letter they hold.

A pose often used by Claudet in a husband-and-wife portrait places the man in a chair before a window and the woman standing beside him, usually with her hand on his chair. In a charming version of this idea an unidentified couple seems to have emerged from a scene in a novel. Seated on a sofa, the man leans forward, smiles slightly and gazes romantically at the young lady beside him, who seems oblivious to his attention.

In another delightful portrait - this one of twin sisters in identical striped dresses - one girl sits at a table deeply involved in a book, while the other leans on the back of her chair and smiles at the camera.
Claudet also used specific domestic themes popular with artists such as "the music lesson" and "the geography lesson." Claudet's version of the geography lesson has already been mentioned; an example of the music lesson can be found in his portrait of an anonymous young girl and her mother. Standing at a piano, the girl rests her hand on the keys, while her mother studies a sheet of music.

The representation of people in familiar situations relates to a special genre form in art, which had developed in England in the 18th century, called "conversation pieces." Popularized by the painter Hogarth, who disliked the more formal portrait conventions, these paintings presented two or more people in an informal setting.

Claudet's use of genre themes in group portraiture is consistent with the development of his style and his ideas about what art should do. Like an alchemist, Claudet wanted to construct an illusion of a real environment on the daguerreotype plate, and his development as an artist is directed to this end. He also admired contemporary ideas of beauty and conventions in painting and portraiture. He was convinced that the camera - if its operator possessed that all-important 19th-century quality, "genius" - could do more effectively what a painter did. At the time Claudet was working, verisimilitude was an important goal of many academic painters, and in England and France from the late 18th century to the mid-19th century painting was sculpturally conceived, i.e., plastically rendered figures acted out dramas in a stage-like space.

For Claudet the picture space became a stage for the interplay of plastic forms and the photographer, the director. In that context he was highly successful in many works. His control of lighting and careful arrangement of people and objects to build a life-like scene of sculptural figures within a deep, convincing three-dimensional space is his greatest accomplishment as a photographic artist.
The final goal, which he was unable to accomplish to his own satisfaction, was the addition of movement to the stereo slide. It represented one more step in his fantasy of creating an illusion of the real world on a daguerreotype plate. The only surviving example of this pursuit is a stereo daguerreotype self-portrait comprised of two different images of Claudet smoking a cigarette. On the left side of the slide Claudet holds out the cigarette; on the right, he brings it to his mouth. To obtain the suggestion of motion, it was necessary to use an instrument Claudet devised with a sliding-shutter eyepiece so that each side of the stereo pair was viewed separately and quickly. Using the same concept, Claudet photographed boxers in the act of fighting and a man removing his hat. Neither of these stereo slides has survived.61

Claudet's desire to reconstruct reality is consistent with his love for the daguerreotype and his reluctance to give up the process, even though most other photographers had forsaken it for the collodion technique. The exquisite rendering of fine detail the daguerreotype could yield was far more appealing to Claudet than the calotype or even the albumen print.

In view of Claudet's love of definition and sharpness within a photographic image, it is interesting to note that late in his life he advocated soft focus for artistic effect in photographic portraits. In a paper presented on August 27, 1866 to the Photographic Society in London, he said:

Excessive minuteness is the greatest reproach which has been made by artists to the best photographic portraiture, and, in order to obviate it, some have gone so far as to suggest that it would be desirable that photographers should take their portraits a little out of focus. But these artists, forgetting certain laws of optics failed to observe that it was impossible to represent the whole of the figure in the same degree out of focus.

Convinced myself of the advantage which, in an artistical point of view, would result from photographic portraits being taken in such a manner that they should as much as possible
resemble a work of art, in which all the features are marked by light touches of the brush or pencil, softly blending from light to shade, such an important subject has for a long time occupied my attention. My precise object has been to discover a method of removing, if possible, from photographic portraiture that mechanical harshness which is due to the action of the most perfect lenses. 62

The method that Claudet found satisfactory for obtaining a consistently well-defined image without excessive sharpness was simply to move the lens in and out during exposure. The idea was not really new; however, Claudet refined the concept into a predictable system by experiments with his focimeter. In the following year he anticipated the diffusion lens for portraits by designing a moveable combination-lens system.

Claudet's proposals for softening the focus precipitated a lengthy and heated debate over the aesthetic legitimacy of such endeavors. In reply, Claudet made his famous defense for the creative manipulation of the photographic image:

It has been said that the plan I have proposed is a heresy in the science of optics, and a dodge unworthy of being adopted in photography! I think that there is nothing so heretical in the science of optics as to pretend to represent a solid with a converging lens, which can have but one mathematical focus, and consequently is incapable of imparting to all the planes of the solid an equal definition....Call it a heresy or a dodge if you like, but look at the result, and if it be good what matters the name given to it? When a dodge is capable of improving any production in art or anything else, is it not very ridiculous to condemn it and to refuse to adopt it because it is only a dodge? ....Are there no dodges in painting, sculpture, and other arts? and are they rejected when they produce the least advantage or improvement? ....Therefore let us hear no more of dodge and heresy, unmeaning expressions, conveying with them no argumentative reasoning; but let us employ all the means we can, whether they are empirical or scientific, simple or clever, and whatever be their nature, provided we can by their
use improve what we do imperfectly...Let us, then, without prejudice, jealousy, sneer, or bad humor, examine calmly any new theories or processes which may be offered to us by thoughtful and conscientious men.  

Curiously enough, although Claudet spoke eloquently on behalf of the photographer's right to manipulate an image made with a camera, no examples have survived as testimony to his own soft-focus work.

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Within twenty-five years after the invention of photography critics, painters and photographers alike were debating the issue of whether or not photography could be art - if a photograph was capable of conveying beauty, feeling and imagination. The outcome of a court case in France - the Mayer and Pierson case - answered this question legally in that country when, in July 1862, a French court decided that photography was indeed an art form and as such was protected by the same copyright laws as any other art. Many painters, the most vocal in a group led by Ingres, protested against this decision and sought in vain for a reversal of the court's ruling.

At this time Claudet became one of the leading spokesmen for the acceptance of photography as art in England. With his portraits he had already shown how a photographer could control and manipulate forms, environment and light to make an aesthetic statement. Now, in the last decade of his life, he also waged a campaign in journals and in public debates. His closing comment in the letter to Camille Silvy insisting that photography be classified under the Art rather than Machine section of the forthcoming 1862 International Exhibition could have been his epitaph:

...if, in the history of photography, my name is recorded, I am convinced, at least I hope, that it will not be in words of blame
for my having endeavoured to have photography called a Fine Art. 64

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Claudet died suddenly at his home on December 27, 1867. He was 70 years old and had been active and well up until that time. An injury that he received a few days before in getting off a bus may have contributed to his death; however, one obituary attributed the cause to heart disease.

One month after Claudet's death a fire raged through his gallery on Regent Street totally destroying the elegantly decorated reception rooms, waiting rooms, dressing rooms and Claudet's office. With the destruction of the gallery were lost many works and documents. A contemporary report of the contents of the gallery at the time of the fire mentions over 20,000 negatives, portraits of Claudet and others, daguerreotype etchings, technical apparatus and studies, and stereo slides and equipment. 64
NOTES AND REFERENCES


7. Unpublished notes by Antoine Claudet's daughter Mary regarding family history, dated April 1910.


10. Ibid., p. 174.


12. Claudet's first gallery was called "The Adelaide Gallery," although he is never listed in the London Postal Directories as having a business address on that street. The Royal Adelaide Gallery of Practical Science is listed at 7 Adelaide Street, and advertisements for Claudet's portraiture definitely connect him with that institution.


14. The legality of Richard Beard's opening of a daguerreotype studio was questionable. Operating under his (in effect Alexander Wolcott's and John Johnson's) patent for the "American Photographic Process," Beard did not initially have a license from Daguerre. Looking back on these early years, Claudet expressed some resentment towards this occurrence: "Then, without a license, and in defiance of the patentee, Mr. Beard, having bought an American invention by which, substituting a large concave mirror for the object-glass of Daguerre, found it was possible to operate upon a very small plate placed
in the focus of the mirror, with a greater rapidity than by Daguerre's plan. Beard was allowed by the Polytechnic Institution to erect on the top of the building a glass-room and he began to take portraits by the said American photographic process. He intentionally dropped the name 'Daguerreotype'. You recollect the success and popularity of the process." (The Philadelphia Photographer, Vol. V, No. 53, May 1868, p. 174).


16. The Art-Union, August 1, 1841, p. 139.


19. It is likely that all Claudet's correspondance was also destroyed in the fire, adding to our loss.


21. Dates are based on listings of business addresses in the London Post Office Directories. My fixing of dates assumes that the L.P.D. information was generally about six months to a year late.

22. Specifically I know of the existence of slightly over 100 daguerreotypes from the 107 Regent Street period; approximately 30 from the Adelaide Gallery period; and about 15 from the 18 King William Street period.


24. Ibid., p. 134.


27. The Art-Union, July 1, 1846, p. 216.

28. The Art-Union, March 1, 1847, p. 110.

34. The Art-Union, Vol. 4, April 1, 1842, p. 84.
35. Nor is there any mention of the photographs of Claudet by Talbot in the form of genre calotypes, such as "The Chess Players." Their correspondence ranges between the years 1842-1867, throughout Claudet's photographic career.
36. Unpublished letter from Claudet to Talbot, 27 Octobre 1843; translation by author:
   "Depuis mon retour de Paris j'ai beaucoup travaillé mon art et je l'ai amène à un point de grande perfection. Je fais à présent avec beaucoup de certitude des portraits qui sont réellement admirables. Je prouverai qu'il est possible non seulement de faire des portraits ressemblants mais encore de les faire agréables. Il fallait cela pour racheter la réputation du Daguerreotype qui a tant souffert des premiers abominables essais qui ont d'abord été lancés dans le public. À cet égard je ne suis pas plus exempt de reproches que tous les autres et je suis réellement honteux quand je vois mes premières productions...."
37. The Literary Gazette, No. 1477, May 1845, p. 300.
   Claudet's competitor, Richard Beard, had patented a process for coloring daguerreotypes, in March 1842, which Gernsheim suspects he obtained from the Swiss miniaturist painter, J. B. Isenring. Beard's method consisted of making a glass copy of the daguerreotype and then a set of separate stencils from the glass for each color to be used. The dry pigment was mixed with a little gum arabic and then applied to the plate by a brush or hand-dusting.
38. The Atheneum, July 4, 1846, p. 689.
39. Unpublished letter from Claudet to Talbot, 20 Aout 1844; translation by author:
   "Le portrait avec l'épée et en habit de consul est celui de Pritchard. Il est venu de faire
faire Daguerreotype et nous avons profité de l'occasion pour faire un Talbotype. Le négatif est très beau et nous avons obtenu de trois beau copies. Le [Illegible] est d'après nature et je crois que vous en serez satisfait..."

40. Unpublished letter from Claudet to Talbot, 24 Aout 1844; translation by author from original:
   "Jusqu'à ce que nous ayons pu opérer avec le Talbotype en quelques seconds et aussi rapidemt qu'un Daquerreotype, je dirai que l'avantage sous ce support pour obtenir une expression agréable est du côté du Daguerreotype."

41. Unpublished letter from Claudet to Talbot, 24 Aout 1844; translation by author from original:
   "Jusqu'à ce que nous ayons pu opérer sur une surface aussi homogène et aussi parfaite qu'une plaque d'argent, je dirai que le Daquerreotype donne des images plus delicates, plus finies, et d'une plus grande perfection que le Talbotype."

42. Unpublished letter from Claudet to Talbot, 30 Novembre 1844; translation by author from original:
   "Tous nos essais se faut sur grands portraits; au fait, je crois que c'est la dimension la plus favorable pour le Talbotype, parceque les défauts de la texture du papier sont moins apparent..."

43. Unpublished letter from Claudet to Talbot, 23 Aout 1844; translation by author from original:
   "Aujourd'hui à mon grand etonnement je receois une lettre fort peu polie dans laquelle il dit: [Remainder of citation in English]"

45. Unpublished letter from Claudet to Talbot, 30 Novembre 1844; translation by author from original:
   "Murray est un peu lent et il a besoin d'être souvent poussé, mais je le faconnerai a mon système qui est de travailler sans relache, je le fais frissonner lorsque je lui parle de prendre 40 negatifs par jour mais comme c'est le seul moyen de se rendre maitre du procede, il faudra qu'un beau temps il arrive à ce nombre."

44. Unpublished letter from Claudet to Talbot, 24 Aout 1844; translation by author from original:
   "Il vous aura sans doute écrit lui meme et vous aura peut être donne l'idée que je néglige
le Talbotype et que je fais valoir le Daguerreotype au détriment de votre procédé. Je vous assure qu'il n'en est rien. J'ai pris le Talbotype dans l'intention de le faire prospérer et je n'épargnerai ni dépenses, ni peine pour arriver à ce résultat. Je serais honteux si on pourrait m'accuser du contraire.

46. Unpublished letter from Claudet to Talbot 24 Aout 1844; translation by author:

"Je n'en pas encore vu des portraits aussi parfaits ni de M. Henneman ni d'aucun autre opérateur. Ces portraits ont des yeux et des habits, tout est venu.....Je ne vous envoie pas les meilleures copies de ces portraits de craindre de les gâter durant le trajet mais celles ci vous suffisant pour juger."

47. Unpublished letter from Claudet to Talbot, Novembre 30 1844; translated from the French by author.

".....pour accroitre l'effect des blancs and des noirs du négatif and en même temps neutraliser les défauts du papier."

48. The Art-Union, Vol. 7, June 1, 1845, p. 171. (See also The Art-Union, Vol. 7, May, 1845, p. 138 and The Literary Gazette, No. 1477, May 10, 1845, p. 300.)

49. Unpublished letter from Claudet to Talbot, 22 Février 1853; translation by author:

"Au retour de la belle saison je vais me livrer avec zèle aux experience sur le Talbotype dont les applications sont si étendres et qui a un du (illegible) bel avenir."


51. The official catalog of the 1851 Exhibition contains an ad for Claudet's daguerreotype studios at 107 Regent Street and at the Colosseum.


53. The Atheneum, April 1857, (no page ref.).


56. Eight of Claudet's stereo views of the Exhibition are included in the Gernsheim Collection at the University of Texas; two others are preserved at the IMP/GEH. They include closeup views of statues and still lifes, and overall views of the furnishings and architecture of the interior. Claudet used two cameras side by side to take these stereo pairs; he later obtained a specially designed stereo camera with two lenses mounted side by side on the lens board. Claudet sent some of his stereo views of the Exhibition to the Czar of Russia, who had been unable to attend the Exhibition. The Czar was so thrilled with the daguerreotypes that he sent to Claudet a diamond ring along with a highly complimentary letter praising the three-dimensional effect of the scenes. Claudet then photographed the diamond ring in stereo. This rather unusual image can also be found in the Gernsheim Collection. (Claudet had sent the stereo daguerreotypes to the Czar upon the suggestion of Mr. Hamel, the British ambassador to Russia at the time.)


58. These two sisters were the daughters of Claudet's brother, Charles, who had changed his name to Fleury. Each sister married one of Claudet's sons: Fanny married Frank and Josephine married Henry.


61. Claudet patented a stereo viewer with a sliding shutter eye piece to suggest motion in March 1853. The figure on the following page, taken from Claudet's patent specifications, is reproduced from Arthur Gills' article, "The First Movie?", The Photographic Journal, 109, January, 1969, pp. 25-29. In September 1865, Claudet gave a speech to the British Association on the results of his work combining motion and stereography. The speech, titled "Moving Photographic Figures" is published in several journals (see Appendix).
62. Claudet, A., "New Process for Equalizing the Definition of all the Planes of a Solid Figure Represented in a Photographic Picture," The British Journal of Photography, August 31, 1866, p. 415.

63. Claudet first recommended that the lenses should be constructed so they could be removed, with the front lenses stationary during the exposure and the back lens adjustable with a rack and pinion system. Claudet's refinement of this system, called "a self-acting focus-equalizer," was designed to overcome the difficulty with the previous procedure in that the superimposed images varied in size according to the alternation of focus. The new plan, which Claudet submitted to Voigtlander for approval, involved the movement of both lenses (rather than only the back lens) in opposite directions from the fixed center of their combination according to rigid mathematical calculations.


List of Illustrations (Transparencies)

Abbreviations:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>LA</td>
<td>Lacock Abbey, Wiltshire, England</td>
</tr>
<tr>
<td>FTM</td>
<td>Fox Talbot Museum, Lacock, Wiltshire, England</td>
</tr>
<tr>
<td>IMP/GEH</td>
<td>International Museum of Photography at the George Eastman House, Rochester, New York</td>
</tr>
<tr>
<td>KMH</td>
<td>Kodak Museum at Harrow, Eng.</td>
</tr>
<tr>
<td>PC</td>
<td>Private Collection</td>
</tr>
<tr>
<td>RPS</td>
<td>Royal Photographic Society, London</td>
</tr>
<tr>
<td>SML</td>
<td>Science Museum, London</td>
</tr>
<tr>
<td>UTA</td>
<td>University of Texas, Austin (Gernsheim Collection)</td>
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<tr>
<td>V&amp;A</td>
<td>Victoria and Albert Museum, London</td>
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<tr>
<td>cal</td>
<td>calotype</td>
</tr>
<tr>
<td>dag</td>
<td>daguerreotype</td>
</tr>
<tr>
<td>sd</td>
<td>stereo daguerreotype</td>
</tr>
<tr>
<td>Neg</td>
<td>negative</td>
</tr>
<tr>
<td>AG</td>
<td>Adelaide Gallery, Strand</td>
</tr>
<tr>
<td>KW</td>
<td>18 King William Street and Colosseum</td>
</tr>
<tr>
<td>RS</td>
<td>107 Regent Street</td>
</tr>
</tbody>
</table>

1. Claudet, A., Self-Portrait, paper print from cal neg, 6½ x 8½", 1844, LA.

2. Claudet, A., Portrait of daughter Mary, later print from original neg (?), 6 1/4" x 4 1/2", IMP/GEH.

3. Claudet, A., Portrait of wife Julia, later print from original neg (?), 5 3/4" x 4 1/4", IMP/GEH.


7. Case label, Adelaide Gallery, Strand.

8. Claudet, A., Colour-Sergeant, Cold-Stream Guards, dag. 5"x4" AG case, evidence of tinting, c.1843, PC.

9. Claudet, A., Young Woman with a Bonnet, dag, AG case, c.3½" x 2½", PC.

10. Claudet, A., George Houghton, dag, unlabelled case, c.4" x 4½", c.1841-43, RPS.

11. Claudet, A., Man with Library Background, dag, AG case, c.1842-43, PC.
12. Claudet, A., Seated Young Man, dag, AG case, c. 2 5/8" x 2 1/4", c. 1842-43, PC.

13. Claudet, A., Woman Reading, cal, 6 1/2" x 8 1/2", 1844, SML.


15. Ibid. FTM.

16. Ibid., RPS.

17. Claudet, A., Unidentified Man, dag, AG case, c. 1843, LA.

18. Claudet, A., Portrait of Man (possibly a self-portrait), dag, AG case, c. 1843, LA.


20. Claudet, A., Young Lady, dag, AG case, c. 2 5/8" x 1 7/8", c. 1843-45, UTA.

21. Claudet, A., Young Lady, dag, AG case, 2 5/8" x 2 1/4" c. 1843-45, PC.

22. Claudet, A., Man w/Checkered Tie, dag, AG case, c. 2" x 2 1/2", c. 1843-45, UTA.

23. Claudet, A., Unidentified Man, dag, AG case, c. 1844-45, LA.

24. Claudet, A., Lady w/Reading Glass, dag, AG case, c. 2 1/4" x 2, tinted, c. 1845, PC.

25. Claudet, A., Unidentified Young Man, dag, AG case, dated October 23, 1845, PC.

26. Claudet, A., George Pritchard, cal, August 1844, SML.

27. Claudet, A., Girl Sewing, modern print from cal neg c. 6 1/2" x 8 1/2", 1844, SML.

28. Claudet, A., Woman, resembling Claudet's Wife, modern print from cal neg, c. 6 1/2" x 8 1/2", 1844, SML.

29. Claudet, A., Woman and Child, modern print from cal neg, 6 1/2" x 8 1/2", 1844, SML.

30. Claudet, A. (?), Man Writing at Table, modern print from cal neg, 6 1/2" x 8 1/2", 1844, SML.

31. Case label, 18 King William Street & Colosseum.
32. Photograph: Junction of William IV Street and Adelaide Street, 1939, from National Monuments Library.


34. Claudet, A., John Flight (one of Houghton family), dag, KW case, 3' x 3 3/8", tinted, c.1847-50, RPS.

35. Claudet, A., Unidentified Man, dag, KW case, 3 1/4" x 3 3/4", c.1847-50, RPS.

36. Claudet, A., Unidentified Lady, dag, KW case, 2" x 2 1/2", tinted, c.1850, UTA.


39. Claudet, A., Portrait of his daughter-in-law, sd, tinted, c.1855-60, PC.

40. Label on back of stereo daguerreotype, 107 Regent Street.

41. Claudet, A., Unidentified Man, sd, Rs label, tinted, c.1855-1860, KMH.

42. Claudet, A., Stereographic Study with A. Claudet and son, Frank, sd, RS label, C.1851-55, PC.

43. Claudet, A., Bishop Spencer of Jamaica and daughter, Mrs. Harvey, sd, RS label, tinted, dated 1857, UTA.

44. Claudet, A., Group portrait of his three daughters-in-law, sd, c.1855-60, PC.

45. Claudet, A., Emma Frederica Spencer, wife of Charles V. Spencer, sd, RS label, tinted, dated April 28, 1857, IMP/GEH.

46. Claudet, A., John A'Court Gray, sd, RS label, tinted, dated 16 September 1857, UTA.

47. Claudet, A., Unidentified Old Man, sd, RS label, tinted, c.1855-60, IMP/GEH.

48. Claudet, A., Frank Claudet and four Young Women, sd, RS label, tinted, c.1855-65, IMP/GEH.

49. Claudet, A., Victorian Interior, sd, RS label, tinted, c.1851-55, UTA.
50. Claudet, A., Boy in Uniform, sd, RS label, tinted, c.1855-60, KMH.

51. Claudet, A., Unidentified Young Girl, sd, RS label, tinted, c.1855-60, IMP/GEH.

52. Claudet, A., Boy w/Mirror, in Claudet patented case, sd, RS label, tinted, 1855-60, RPS.

53. Claudet, A., Boy w/Mirror, sd, RS label, tinted, 1855-60, RPS.


55. Claudet, A., Lady w/White Scarf, sd, RS label, tinted, c.1855-60, KMH.


57. Claudet, A., Portrait of Fanny and Josephine Fleury, dag, AG case, tinted, c.1844-46, PC.


59. Claudet, A., Girl w/Basket of Flowers, sd, RS label, tinted, c.1855-60, IMP/GEH.

60. Claudet, A., Claudet Family Portrait: A. Claudet, Mary and wife, Julia, sd, RS label, tinted, c.1860-65.

61. Claudet, A., Mrs. Glanville and Harriet Spencer, her Daughter, sd, RS label, tinted, dated: June 1857, UTA.

62. Claudet, A., Unidentified Man and Woman, sd, RS label, tinted, c.1855-60, KMH.

63. Claudet, A., Unidentified couple, sd, RS label, c.1855-65, PC.

64. Claudet, A., Twin Sisters, sd, RS label, c.1855-65, PC.

65. Claudet, Music Lesson(?), sd, RS label, tinted, c.1855-65, IMP/GEH.

66. Claudet, Self-Portrait Smoking a Cigarette, sd especially made for effect of motion, c.1853, PC.

67. 21 Gloucester Road, London, Claudet's home from 1852-67.
68. Receipt from Claudet's Gallery at 107 Regent Street, Bodleian Library, Oxford.
APPENDICES

Patents taken out in England by Claudet:

No. 9193 December 18, 1841 "Claudet's Improvements in Obtaining Images or Representations of Nature or Art"
1. A camera in which changeable lenses on a fixed board can be used.
2. Adaptation of the camera so that development with fumes of mercury can occur inside camera box.
3. Use of painted backgrounds.
4. Use of artificial lights (combustion of oxygen and other gases) as light source for photographic exposure.
5. Red darkroom safelight.

No. 9957 November 21, 1843 Chemical engraving process of daguerreotype plate for multiple printing.

No. 711 March 23, 1853 "Improvements in Stereoscopes"
1. A stereo viewer with moveable parts to give illusion of moving figures when used with specially made stereo daguerreotype slides.
2. Portable, collapsible stereoscope for more convenient viewing.

No. 515 September 7, 1853 Elaboration on specifications for patent No. 711 relating to stereoscopes.

No. 3107 December 14, 1864 "Improvements in Photo-sculpture"

Letters to William Henry Fox Talbot:

4 January 1842 Adelaide Gallery
5 January 1842 Adelaide Gallery
18 August 1842 Adelaide Gallery
7 October 1842 Adelaide Gallery
10 October 1842 Adelaide Gallery
28 October 1842 Adelaide Gallery
19 November 1842 Adelaide Gallery
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<td>107 Regent Street</td>
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<td>30 June 1858</td>
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<td>31 December 1860</td>
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<td>26 October 1864</td>
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<td>1 November 1864</td>
<td>107 Regent Street</td>
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<tr>
<td>9 January 1867</td>
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Selected list of published talks, articles, letters by Claudet.

1841

"On a new process for accelerating the production of the image on the Daquerreotype plate by the addition of bromide and chloride of iodine to the iodide of silver." Read before the Royal Society, June 10th, 1841.

Phil. Mag., vol. xix, p. 167.

"On the non-coincidence of the focus of the photo-genic rays with that of the visual rays of the solar spectrum." Read before the Royal Society, 1841.


Académie des Sciences, May, 1844.

Phil. Mag., November, 1849.

Letter to editor explaining electrotyping process in response to earlier article.

The Literary Gazette, No. 1301, December 25, 1841, p. 838.

Letter to editor on his own daguerreotype process.

The Spectator, September 11, 1841 (no page ref.).

1847

"On the progress of photography." Read before the British Association, Oxford, 1847.

Trans. Soc. Arts, Sup. vol., p. 196.

"Des actions que les diverses radiations solaires exercent sur les couches d'iodure, de chlorure ou de bromure d'argent."

Comptes Rendus, t. xxv. pp, 554, 555.

"On the different properties of solar radiation producing or preventing a deposit of mercury on silver plates coated with iodine, or its compounds with bromine or chlorine, modified by coloured glass media, and the atmosphere." Read before the British Association, Oxford.

Phil. Trans., 1847, pp. 253, 262.


Phil. Mag. 1848, vol. xxxii, pp. 88, 98.


1848
"On the action of the red, orange, and yellow rays upon iodised and bromo-iodised silver plates after they have been affected by daylight, and other phenomena of photography." Read before the British Association, Swansea, 1848.

The Daguerreian Journal, Vol. I, No. 6, February 1, 1851, under title: "Photographic Phenomena referring to the various actions of the red and yellow rays on daguerreotype plates when they have been affected by daylight," p. 169.

*"On the Photographometer, an instrument for measuring the intensity of the chemical action of the rays of light on all photographic preparations, and for comparing with each other the sensitiveness of these different preparations." Read before the British Association, Swansea, 1848.


1849


1850
"On the Dynactinometer, an instrument for measuring the intensity of the photogenic rays and comparing the power of object-glasses, with observations on the difference between the visual and Photogenic Foci, and their constant variation." Read before the British Association, Edinburgh, 1850.

Phil. Mag., 1851, vol. i, p. 478.
Published separately in Paris by Lerebours et Secretan.
1851

"Accelerating Process. Question of priority respecting the discovery of the accelerating process in the daguerreotype operation."


La Lumiere (no reference).

*"On the use of a Polygon to ascertain the intensity of the light at different angles in the photographic room."


1852

*"On the Stereoscopometer, and on a manifold binocular camera." Read before the British Association, Belfast, 1852.


1853

*"On the angle to be given to binocular photographic pictures for the stereoscope." Read before the British Association, Hull, 1853.


*"On the Introduction of Mercurial Vapor into the Camera in Daguerreotyping."


*"Le stéréoscope et ses applications à la photographie."

*Soc. Arts Jour., Vol. i, p. 97.

1855

*"On the Polystereoscopticon, an instrument with mechanical arrangements, by which many stereoscopic
pictures can be successively changed and examined at once by six persons. Read before the British Association, Glasgow, 1855.

1856  *"On various phenomena of refraction through semi-lenses or prisms producing anomalies in the illusion of stereoscopic images." Read before the British Association, Cheltenham, 1856.

1857  *"On the phenomenon of relief of the image formed on the ground glass of the camera obscura." Read before the Royal Society, 1857.
  Phil. Mag., 1858, vol. xv., p. 397.
  Photo. Soc. Jour., 1858, pp. 124, 126.

1858  *"On the Stereomonoscope, a new instrument by which an apparently single picture produces the stereoscopic illusion." Read before the Royal Society, 1858.
  Phil. Mag., 1858, vol. xvi, p. 462.
  The Photographic News, Vol. 1, 1858, 3 parts:
  Sept. 10, 17, 24, 1858, pps. 3, 14, 26 respt.
  Bulletin de la Société française de Photographie,
  Tome IV, Octobre, 1858, pp. 255-260.
1859

*"On the stereoscopic angle, and etc.; on the stereomonomoscope; on the focus of object glasses; on a changing diaphragm for double achromatic combinations."


"The Stereoscope."


1860

*"On the principles of the solar camera." Read before the British Association, Oxford, 1860.


The Photographic News, 1862, Vol. 6 (no page ref.).

Bulletin de la Société française de Photographie,

Tome Septième, Janvier, 1861.

*"On the means of increasing the angle of binocular instruments in order to obtain a stereoscopic effect in proportion to their magnifying power." Read before the British Association, Oxford, 1860.


*"Photography in its relations to the fine arts." An essay read May 6, 1860, before the Photographic Society of Scotland on the occasion of the author's election as a member of the society.


Gazette des Beaux Arts, Janvier, 1861, Tome 9.

pp. 101-114.

Humphrey's Journal, (no date ref.) pp. 108-110.

1861

"On the Classification of the International Exhibition of 1862 as regards photography." (letter to editor)


"Photography as a Fine Art. A Monsieur Silvy."


*"On the laws which regulate the conjugate foci and the sizes and proportion of images according to the distance of objects. New method for computing all these various measurements."

"On the means of following the small division of the scale regulating the distances and enlargement in the solar camera." Read before the British Association, Cambridge.


"Rule for finding at once both the distances of negative and sensitive surface for any degree of enlargement and vice versa." Also, "Table of proportions and distances on both sides of lenses from the point which is the zero of measurement."


"Accroissement de l'action photogenique par la substitution de l'acide formique a l'acide acetique dans le bain revelateur d'acide pyrogallique."


"The New Picture Galleries."

The Photographic Journal, Vol. 8, No. 120, April 15, 1862, p. 32 ff.

"Enlargement of photographs."


"Enlargement of drawings."

"The Enlargement of carte de visite portraits."

"On some phenomena produced by the refractive power of the eye." Read before the British Association, Newcastle.

Comptes Rendus, t. 1vi, p. 89.

"The Star Chromatocscope, an instrument to examine and compare the rays of the stars." Read before the British Association, Newcastle.

1864

"On Photo-sculpture." Read before the British Association, Bath.

1865

"On moving photographic figures, illustrating some phenomena of vision connected with the combination of the stereoscope and the phenakistoscope by means of photography." Read before the British Association, Birmingham.
- Bulletin de la Société française de photographie, vol. 11, 1865 (no page ref.).

"On stereoscopic phenakistoscopy." Read before the British Association, Birmingham.
- Photo. Jour., Nov. 16, 1865, p. 189.

"Description de la photoplastigraphie, Nouveau procede de Photosculpture."

1866

"On photography as an art." Read before the British Association, Nottingham, 1866.

Article on focussing and stereoscopic vision.

"The 'Gazette des Beaux Arts' on photography." Read before the British Association, Nottingham, 1866.

"On a means of introducing harmony and artistic effect in photographic portraits by equalizing the definition of the various planes."
- The British Journal of Photography, Nov. 16, 1866, pp. 546-549.
**Optics of photography: on a new self-acting focus-equaliser, or the means of producing the differential movement of the two lenses of a photographic optical combination, which is capable, during the exposure, of bringing all the planes of a solid figure into focus, without altering the size of the various images superposed." Read before the Royal Society, 1867.


"On a photographic unity of measure for calculating any enlargement or reduction of photographic reproductions, and all respective focal distances and distances of objects."

"The physiology of binocular vision, stereoscopic and pseudoscopic illusions."

**On a new fact relating to binocular vision." Read before the Royal Society, 1867.

"On the production of natural colours by photography."

"On photographic portraits obtained by single lenses of rock crystal and topaz." Read before the British Association, Dundee, 1867.

"On a mechanical means of producing the differential motion required to equalize the focus for the different planes of a solid—latest improvements since the communication to the RS."

"Sur son objectif egalisateur des foyers."

"Photosciagraphy, on the art of painting portraits, only from the shadow of the photograph projected on the ordinary canvas or paper, while the artist is at work. Description of process invented by Claudet."

1868
   letter to Mr. P. LeNeve Foster regarding the early history of photography and discussion of attempts to accelerate the speed of the daguerreotype plate.

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Abbreviations:

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<th>Abbreviation</th>
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<td>Phil. Mag.</td>
<td>Philosophical Magazine</td>
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<tr>
<td>Trans. Soc. Arts.</td>
<td>Transcript of the Society of Arts</td>
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