SAIBR

Pictorial History Committee Newsletter – Supplement

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NBL COOPERSTOWN, N.Y

HPD

subject C

HoF plaque

If you are familiar with the earliest of baseball imagery, you have seen the well-known c1846 daguerreotype, **above left**. This half-plate daguerreotype (hereinafter referred to as "the HPD") has been claimed to depict six members of the influential Knickerbocker club. Specifically, it has long been claimed and accepted that the man, back row center, is Alexander Joy Cartwright Jr. (AJC). He is hereinafter referred to as subject C.

In 1938, his grandson Bruce Cartwright Jr. sent a copy of that image to the Hall of Fame along with a letter that stated, "I enclose herewith a portrait of Alexander Joy Cartwright Jr., 'The Father of Organized Baseball.'....I hope that it can be used by the sculptor in making the bronze plaque for the Base Ball Hall of Fame." It indeed was used for that purpose.

In this issue a case is made that this identification should not be accepted. Also included are contrary opinions. The subject matter is organized as follows:

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Perspective

It may seem strange to begin with a brief discussion of Lincoln photographs. The objective is to provide the reader with some perspective related to the issues presented later.

There are more than 90 known "accepted" portraits of Lincoln (depending on your definition of "portrait"). They share some important things in common. While these photos span a time period of almost 20 years, to a trained eye (and to most untrained eyes) they all "look like" Lincoln. Most people maintain a certain subjective "look" throughout their lives.¹

Much more importantly, if you isolate and compare individual features, they match. There may have been some predictable change over time due to aging, but the high degree of similarity of features like the ears, lips, philtrum, and nose is evident. Also, features firmly based in the skeletal structure, such as cheek bone locations and forehead width, also match when they can be discerned.

This should not be surprising - that's what happens when who have a group of photos of the same person. I will go out on a limb here and say that you simply won't find an experienced forensic facial comparison expert who would be willing to say that any of these wellknown photos are unlikely to be old Abe.

In the photos **just right**, we have clear matches for the ears, the lips and the philtrum (vertical indentation between the upper lip and nose). A bit more scrutiny is required to notice that the end of the noses have a similar shape. Also, the right nostrils and the flesh around the nostrils (nostril flange) are similarly structured.



What if, you may ask, one of the photos shows the person after he has suffered a severely broken nose, or the person is grimacing or smiling broadly so that his lips appear thinner than they do in other photos. Well, the acts of grimacing or smiling leave their own facial clues, and grimacing or not, distinctive philtrum structures are not easy to hide. A broken nose does not often distort all of its features. Squinting may distort the eye shape and appearance of the lid structure to some degree, but some characteristics will still be evident.

When a face shows multiple feature dissimilarities to the other known clear images of a particular person, trying to explain them all away in such a manner can become an exercise in increasing improbability. Either we have a grimacing, squinting subject for whom numerous facial features have changed over time in an very atypical manner, or we have two different persons.

Sometimes photos of the same person do lack subjective resemblance², though opinions may differ. One example involves photos of Cap Anson spanning about two decades, **below**. The older Anson, **far right**, is thought to not resemble the others³. What is important is that these photos have strong external evidence indicating that they are Anson, *and* close examination reveals no facial feature mismatches. The ear shapes match to the extent we can discern them (even the opposite ear is close). All three show the same downward curved chin crease just below the lower lip. The brow ridges with barely visible eyebrows are very similar. Even the young Ansons show a receding hairline. There is no argument to be made from the photos that they can't depict the same person.

So, be it Lincoln, Walt Whitman, Frederick Douglass, U. S. Grant, Dolley Madison, Cap Anson and etc., in spite of differing lighting, head angles. and subtle differences in expression, their "accepted" images pass muster when isolated features are compared. In contrast, it seems that particularly among baseball historians and memorabilia baseball collectors, odd images much too easily gain traction as someone whom they are not.



[1] Forensic Art and Illustration, Karen T. Taylor, CRC Press, 2001 [2] The sense of facial resemblance is a special type of subjectivity controlled by a specific part of the brain. [3] Well – they all look alike to me, but as I understand it, not to everyone.

Just Another Misidentified Baseball Photo?

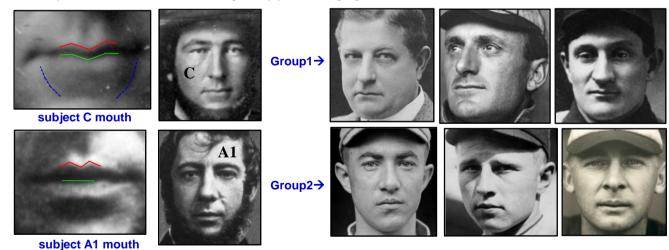
About two years ago I noticed the HPD, **near right**, reproduced in Stephen Wong's *Smithsonian Baseball*. It was claimed to depict six members of the c1846 Knickerbocker club, with C identified as Alexander Joy Cartwright Jr. (AJC). I had seen other images identified as AJC, and my recollection was that they had a very different "look". I was able to quickly find one, subject A1, shown below the HPD, **near right**. Compared to subject C, he is to say the least different. At that time I made the following observations.

When comparing the mouth of C, **below**, **top row far left**, with that of A1, **bottom row far left**, we see a marked difference in lip thickness and in the width of the cupid's bow - the "v" shape at the center of the upper lip which forms the bottom of the philtrum (red lines). Also, subject C shows a very different contouring of the top half of the chin just below the mouth (blue lines). Also the crease lines between the lips are very different (green lines).

The thin lips and wide cupid's bow exhibited by subject C can be found in other faces, as shown below in group 1. The fuller lips with a narrower philtrum exhibited by subject A1 can also be seen in other faces, as shown in group 2. Of course, these features do move, so how likely is it that a person could maneuver his mouth so that he exhibited both mouth types in different photos? Certainly people can



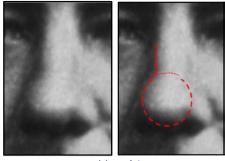
grimace or roll their lips inward to some degree to make them appear thinner, but C does not show indications of grimacing. Smiling very broadly can stretch the cupid's bow and make it appear somewhat wider, but subject C is not smiling. Both C and A1 are virtually expressionless. Are photos of the *same* person showing both mouth types common? I've compared thousands of baseball player faces, and I have never seen such a case. That would be at least very uncommon, if not rare. Furthermore, it is known that "the...crease or...[green] line where the lips meet - stays almost identical even during many years of aging."



For the next point to be made, Hal Chase provides the example. The end of his nose had a ball-like or slightly swollen shape. This is easily seen from the side, **far right**. It is also evident from the front, where we see a highlight on the ball and a horizontal indentation just above it.



The nose of subject A1 is reproduced twice, **right**. It seems to have a bulbous end similar to that of Chase. The horizontal indentation above the ball is somewhat washed out, but it still can be discerned. The ball shape, indentation and nose bridge contour are outlined in red.

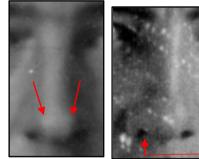


subject A1

Just **right** is another image also identified as AJC, subject A4 . It is very useful for comparison because, like subject C, he is turned slightly to his right. The nose from that image is cropped and magnified. It can be seen to also have a ball-like end as evidenced by the long highlight running down the length of the nose that abruptly stops at the top of the ball, and a small highlight on the ball itself. See green outlines, **far right**.

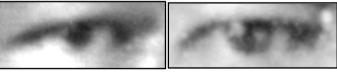
The nose of subject C, **near right**, does not seem to have any evidence of a ball-like end structure. It appears to be somewhat more narrow and less rounded, and highlights indicate a pair of peaks or points (red arrows) on either side of the nose end. Also, the right nostril of subject A4, **far right**, has an irregular shape as viewed from the front (compare his two nostrils). This is not apparent for subject C. Could this all be the result of a subsequent broken nose or injury? The distorted nostril - maybe. But the "rounding" of the cartilage at the end of the nose - that seems very unlikely. I've never seen such an example in photos of the same ballplayer.

The eye shapes don't match very well either. The upper lid edges look very different. Keep in mind that the HPD required a relatively long time exposure. It isn't likely that subject C would hold his eye half open during that time, and he doesn't appear to be squinting. subject A4



subject C

subject A4



subject C right eye

subject A4 right eye

irregular

nostril

shape

Are these differences significant? - every book or article on forensic facial comparison I could find indicated that they were. They tell you to make these comparisons. Thus it seemed that it would be at least highly unusual to see all of these differences in photos of the same person.²

And what of the provenance? The claim that subject C is AJC was made by grandson Bruce Cartwright Jr. in a 1938 letter. The facial differences seemed so significant that the provenance, while puzzling, did not change my view. I later found the provenance to be quite strange. This is addressed on pages 30-31.

What Next?

So, why the delay in writing about this? The HPD isn't just any photo. I wanted to be sure that there wasn't some significant aspect of facial comparison analysis that I was missing that would lead to a different answer. I don't think there was. Two years later I still don't see how subject C and subjects A1/A4 can be the same person. However, I do think it is time for an expert opinion.

[1] Forensic Art Essentials - A Manual for Law Enforcement, Lois Gibson, Academic Press, 2007

[2] Hand coloring or tinting of images was a common practice. However, to account for the differences seen here, features would have to have been completely painted over and redrawn. There is no evidence of that.

Calling in the NYPD

Before we commence discussing faces and experts, I must thank **Corey Shanus**, the long-time owner of the HPD, the c1846 half-plate daguerreotype that is the focus of this issue, for allowing us to use high resolution scans of that image and others in his collection. We fundamentally disagree not only about the contents of this image, but also about how one should determine who is depicted in an historical image. However, he is a fine gentleman and a supporter of open debate. As such, this issue includes the analyses of two experts. one chosen by each of us, as well as comments from Corey.

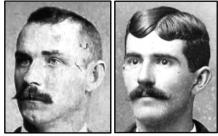
There are many examples of 19thC photos of men in street clothes that have been claimed to be a significant baseball personality whom they are not. In some cases they may look similar to that person, in others not at all. It really doesn't seem to matter. Even though all the other known images of the person are pretty easily discernable as that person, the differences in facial appearance for the photo in question, including numerous specific facial feature differences, are simply overlooked or dismissed without good reason.

Who Is Not a Facial Comparison Expert?

Expertise in one area does not imply expertise in another. Baseball historians excel at historical research. The competency of 19th century baseball imagery collectors includes a knowledge of baseball history and a mastery of the details of the various early photographic processes. None of this implies members of either group are experts at comparing faces in photos. There are some that are pretty good at it. Many others know that they are not and will freely admit it. Then there are some that think they are good at it but they are clearly not. It's what you don't know that you don't know that gets you in trouble.

Of course, a good historian can provide important background information. Also, a collector who has seen over the years many images of, say, Roger Connor, is more likely to spot a mistaken claim than someone with less experience, even if the evaluation is only based on subjective impression (i.e. does he or does he not "look like" Connor?). However, the facial recognition center of the brain is both very powerful and easily fooled. We know that the sense of recognition felt when viewing a face in a photo can be heavily influenced by suggestion from a supposed authority. It is also strongly affected by whom one wants it to be, and thus has a higher rate of error than might be expected. That's why, for example, in the case of a particular photo ridiculously misidentified as Connor, some auctioneers and guite a few collectors got it wrong. There have been many similar cases. Even when a diligent attempt is made at

verification, the steps taken may not be the right ones.



Connor

Connor not

Who Is a Facial Comparison Expert?

Forensic artists are professionals whose skill-set may include facial comparison analysis. They often work for major law enforcement or intelligence agencies, testify in court as expert witnesses, compare faces of suspects from all types of media, identify murder victims from photos, do age progression on missing person photos, draw composite sketches from witness descriptions, etc.

The fact that people with considerable artistic talent have populated this field is natural. They have the requisite eye for facial detail and, in particular, have a high level of understanding as to how the appearance of facial features may change due to differing viewing angles, variations in lighting, and changes in expression. Active forensic artists working for major metropolitan police departments may analyze and compare hundreds or more faces every month, thousands every year, many tens of thousands over a long career. Their primary focus is faces. There is no substitute for that kind of experience.

I am, to say the least, not a practicing forensic artist. Though not a "professional", if you read this publication often you know that I have "tried this at home," having studied the subject as best as I can in the available time. I have a good track record of applying sound principles within my limitations, but I certainly can't do all the things that a trained practitioner can do and I lack the many hours of "face-time" one gets in a full-time job. Due to the importance of the images analyzed in this issue, I have obtained the assistance of forensic artist **Stephen Mancusi**¹, who spent 24 years as *the* senior forensic artist for NYPD. Stephen is a nationally prominent law-enforcement practitioner and teacher with decades of experience.

An Art or a Science?

As to whether a rational approach to facial comparison from images is a science or an art – it is both. Practicing it as an expert is of course an art. However it has a scientific foundation based on knowledge of the characteristics of human faces and what may or may not change over time. For any particular facial comparison, it strives to make a rational argument based upon observation. The analysis is presented in a manner that demands a *specific* rational response if one disagrees with the conclusion.

In this slam-dunk example, the left ears are so obviously different in the Roger Connor comparison, that any proponent of the view that both images depict Connor must provide a plausible and rational explanation for this difference. It can't just be ignored.





The *subjective* impression one gets as to whether two faces resemble each other can still be part of the analysis. This judgment is not intended as a substitute for the detailed comparative analysis, but is an adjunct to it. What is important is that the person making a subjective judgment has both an appreciation of the comparative part and a long track record of being right. This has probative value, but it is very much secondary in importance to individual feature comparison.

Faces Do Change

The appearance of a face can change over time due to changes in weight, illness, effects of aging, etc. However, there are points of reference, some of which will not change, and others that may change in a predictable manner. These can be used effectively in comparing two faces that "look different" but are claimed to be the same person.

The face of John McGraw is familiar to most readers (**top next column**). He certainly did change over the years. However, characteristics such as cheekbone width and iris size will not change and can be noted and compared by a good forensic artist. The images can be size-matched by matching the vertical distance between key features. Then the distances among other facial features can be compared. Ears, nose, lip shape and philtrum can also be compared with allowances for age progression. You will see similar comparisons in Mr. Mancusi's report.



What Can A Forensic Artist Tell Us?

Facial comparison specialists are very conservative with respect to the conclusions they derive from a comparison based on photos. It is uncommon for a report to state that with certainty the two individuals depicted in the photos are the same person. The conclusion may consist of a statement that the two persons could be, are likely, or are highly likely to be the same person.

An analyst may be somewhat less conservative when concluding that the two individuals depicted in the photos are not the same person. A statement that the subjects are highly unlikely to be the same person is possible when there are multiple significant feature differences. In some cases, particular differences can be discerned for which the only rational explanation is that the subjects are not the same person. A very clear ear mismatch, substantially differing spatial dimensions between features, or a demonstrated difference in iris size are typical examples of what could lead to an "exclusionary" conclusion.

Three Faces, How Many Men?

In spite of the very apparent facial differences between subject C and subjects A1/A4, it has been wellestablished for decades² in both the baseball history and baseball memorabilia communities that these images all depict the same person – Alexander Joy Cartwright Jr. The story is that subject C underwent some unspecified illness and/or hardship and morphed into the man depicted in the other two images.

When I first compared subjects C and A1, I thought that they could not be the same person due to the described feature differences. I also thought that a forensic artist would likely come to the same conclusion, but I was not absolutely certain as to whether the C image was clear enough to yield that result. Now we will find out.

You may hear it argued that I have changed my rationale during the past year. I have not. It was and is exactly as described in this issue.

Endnotes:

[1] Stephen Mancusi's web site is http://www.forartist.com/

^[2] Subject C ID'd as Alexander Cartwright Jr., has appeared in at least the following: *Smithsonian Baseball* by S. Wong, *Baseball* by Ken Burns, *Baseball More than 150 Years* by D. Nemec and S. Wisnia, *Live All You Can* by J. Martin, *Players of Cooperstown* compiled by seven authors, and John Thorn's *baseballeden.com*. Also, copies of that face were distributed by HoF on "Cartwright Day", 4-26-1939.

Stephen Mancusi Bio: Stephen Mancusi has been a forensic artist since 1984. He was the senior forensic artist and a first grade detective for the New York City Police Department for almost 24 years. Stephen is the author of the "The Police Composite Sketch", Humana Press 2010. His expertise encompasses all the forensic art disciplines. He has conducted composite sketching sessions with countless victims/witnesses for all types of crimes resulting in the identification of many criminal suspects, including high-profile cases such as The Stuyvesant Town Serial Rapist and the Central Park Assault Case of a young female pianist.

In addition to his work for the NYPD, Stephen has developed forensic images for other law enforcement and governmental agencies including the FBI, U.S. Marshals Service, NYC Medical Examiner's Office and U.S. Postal Inspections Service. As a forensic artist, he has also provided expert testimony during court proceedings throughout New York City.

Stephen Mancusi actively teaches and lectures on forensic art throughout the country. He has addressed a number of groups from varying disciplines including the Mystery Writers of America, Society of Professional Investigators, DEA and the NYPD Detective Bureau's Investigation and Homicide Courses. He conducts training workshops for forensic artists of other police departments throughout North America and for the International Association for Identification (IAI). He is presently the Chairman of the IAI's Forensic Art Certification Board.

He has been featured in articles in the New York Times, London Sunday Telegraph, Evidence Technology Magazine, AM New York and The NY Daily News. Mr. Mancusi has appeared on ABC's 20/20, New York Views, NBC's Unsolved Mysteries, Court TV's Justice Factory, Discovery Channel, Pro 7 German Television Network, Seven Network Australia Sunday Night, Good Morning America, NPR, National Geographic Television and History Channel's MysteryQuest.

A professional artist and illustrator for over 30 years, Stephen's experience encompasses a variety of media including acrylics, digital art, oil, and pastel on a wide range of subject matter for a diverse group of clients. His artwork has also been exhibited in the Metropolitan Museum of Art and other prominent New York galleries.

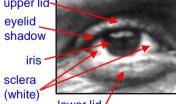
Gallery of Faces and Glossary

Here are the faces and designations as used in the analyses, **just below**. I believe that all originate from the Cartwright family and have been generally accepted to be AJC. Some terms are defined, **below right**.

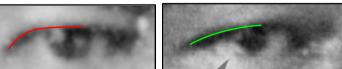


Subject B1 appeared in a July 1892 Honolulu newspaper accompanying AJC's obituary. Subject B3 was identified as AJC in Al Spalding's 1911 book *America's National Game*.

In the Mancusi analysis you will see reference to a "square angle" formed by the lower edge of the upper eyelid (see **below, left)**. This refers to the fact that the lower edge of the upper lid runs somewhat straight across the eyeball from right to left and then reaches a point where it turns downward more quickly (red line) than for the case of the lid, **below right**, which shows a more gradual curve (green line).







Nostril flange

Note: Several additional images identified as AJC were rejected because they clearly exhibited substantial retouching and over-painting of facial features. One interesting portrait is shown **near right**. It appears to share the eye shape and narrow philtrum of A1/A4 with the lips thinned slightly due to a modest smile, though this is all over-painted making a definitive comparison very difficult. A broad swath of white–paint covers his scarred left smile line.



PHC Newsletter Supplement – Oct. 2011

Editor's Note: Mr. Mancusi's was chosen by the editor. His report begins here. Note that the illustrations are grouped together at the end of his report. This is followed by a bio of and a report prepared by Gerry B. Richards, a forensic expert selected by HPD owner Corey Shanus.

ForArtist LLC.

Forensic Artist Stephen Mancusi

Facial Image Comparison Report

Client: SABR Pictorial History Committee Newsletter Photo Supplement Date: December 20, 2010

This facial image comparison analysis will consist of four parts. They are as follows. First, are the persons depicted in the Group 1 images the same man? He will be referred to as "Subject A". Second, are the persons depicted in the Group 2 images the same man? He will be referred to as "Subject B". Third is it possible that "Subject B" is the same man as "Subject A" but at an older age? Lastly is the man in the middle of the top row in an 1846 daguerreotype possibly the same man as "Subject A" or "Subject B"? He will be referred as "Subject C". This 1846 daguerreotype image is believed to depict six members of the influential Knickerbocker baseball club (see image below). All the subjects in this comparison are believed to be Alexander Joy Cartwright Jr.

This analysis is based on digital image copies of the daguerreotypes and the other photographs which were supplied by Mark Fimoff representing the client. The original photographs or daguerreotypes were not available for this analysis. This analysis will be based solely on these supplied images. Since these images are scanned copies of the originals, this report cannot address any digital manipulation issues. However none have been clearly detected. Mark Fimoff did state that the 1846 daguerreotype image in question was purchased by its owner with the help of a daguerreotype expert. This leads one to believe that the age of the daguerreotype image has been authenticated. The images used for this comparison may have been reversed and or cropped from a larger original image. It is important to note that a facial comparison analysis of this type will generally result in an opinion as to the level of possibility toward identification or exclusion. However as an exclusionary tool, it can occasionally offer a more definitive outcome. One strong element of dissimilarity that cannot be explained by other means would result in an exclusionary outcome. Nevertheless, it is also important that this comparison report be considered in its entirety.

Part One:

Are the persons depicted in the Group 1 images the same man? For this question, there are four images in Group 1. They are labeled "A1", "A2", "A3" and "A4" (*see Group 1*). Upon examination of these images, it is determined that a fairly good comparison analysis can be made. Two images are in a relatively similar perspective. All four images have many of the facial reference points and features visible.

The first phase of part one will be to compare the proportional aspect of the subjects. Each person has specific spatial relationships among the facial features on the head. Using digital overlays and superimpositions, I have aligned and registered the subjects (**see illustration 1**). "A1" will be the base image. "A2" was registered and aligned with the significant points of reference. The "A3" and "A4" subjects are slightly angled to the left or right. So, only some of the vertical proportional points of reference could be aligned. The results were as follows. Almost all the proportional elements of "A1" and "A2" aligned nicely. Except for some minor differences which can be easily explained by slightly different camera angle and distance, there is a close proportional match between the subjects of "A1" and "A2". As for "A3" and "A4" the proportional comparative elements fall within an acceptable range of similarity. These results are demonstrated in Illustration 1. The red markers were derived from the proportional points of references on "A1". These exact red markers have been overlaid on "A2". The red horizontal straight lines show the vertical proportional relationship among all four images. If you examine these illustrated points, the aforementioned conclusions are evident. An important size comparison is the circumference of the irises. In all four images the irises are very similar in size (see red circles in illustration 1). This subject exhibits a large iris circumference.

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Forensic Artist Stephen Mancusi

The next point of comparison is the character of the individual features (*see illustration 2*). The upper eye lids of these four subjects possess a square angle appearance at the ends as it follows the contour of the eyeball (see red arrows A). The upper lid is thick. This thickness is exhibited as a continuous shadowed line directly under the lid adjacent to the ball of the eye. The roundness of the eyeball can be clearly seen in the curvature of the eyelids. His eye color appears slightly light. The bridge of the nose is defined and seems to angle slightly to the subject's right side (see red arrows B). A full nose tip that is visible as a distinct ball and fleshy nostril flanges are very similar in all the subjects. A prominent philtrum is apparent on "A1", "A3" and "A4". Its effect on the upper lips exhibits as a small sharp "V" shape (see red arrows C). The upper lips are about the same thickness as the lower lips. The overall lip shape is similar as well on "A1", "A2" and "A3". All four images have comparable smile lines. The scar on the left smile line, though much clearer on "A1", is evident on all the images (see red arrows D). The subjects' eyebrows depict a similar shape and character. The eyebrows have a distinct value contrast as opposed to the skin tone. The hairstyles, hair texture, hairlines and part are consistent for all the four images. The intrusion of the beard onto the face is also consistent and delineates a narrow face shape. The ears shapes are reasonably similar except in "A3" which appears to be distorted. The bone structures of the brow ridges and foreheads are almost exact.

The last point of comparison is the overall appearance of these subjects. Basically do these four men look like the same person? There is a clear individuality and overall character depicted which appears to be consistent in all the images. They generally look like the same person. To answer the question: Are the persons depicted in the Group 1 images the same man? It is highly likely that the subjects of these four images are the same individual.

Part Two:

The next question to address is: Are the persons depicted in Group 2 images the same man? There are three images in this group. They are labeled "B1", "B2" and "B3" (*see Group 2*). Upon examination of "B1" and "B2" it is determined that a very good comparison can be made. "B3" is a three/quarter almost profile image, so limited points of references are visible. However some level of comparison can still be conducted.

As before, the first phase for comparison consists of the proportional elements. "B1" is the base image. When "B2" was registered and proportionally aligned with "B1", the results were an exact match with a minor compensation for a slight turn of the head in "B2" (*see illustration 3*). These results are demonstrated with red markers which were derived from the proportional points of reference on "B1". These exact red markers have been overlaid on "B2". An exact match is clearly evident. "B3" was aligned along the vertical points of reference. The red lines (*see illustration 3*) demonstrate these comparative elements. It clearly shows a very good similarity with all the visible points of the vertical proportion references. These points include the hairline, eyebrows and brow ridge, mouth location, ear location, ear length and even the girth and height of the collar.

When comparing the character of the individual facial features of "B1" and "B2", they are exact. When comparing the features of "B3" to the "B1" or "B2" images, there is a strong similarity (see illustration 4). The droop and age appearance of the eyes are the same (see red arrows A). The puffiness under the eyes exhibited as bags are clearly similar in "B2" and "B3" (see red arrows B). The character of the nose bridge and nose tip accentuated by a large ball is similar (see red arrows C). The apparent arch and shape of the eyebrows appear to match (see red arrows D). The men have distinct smile lines. The shape, texture and length of the beard and mustache exhibit a similar character. Hairs styles and color are reasonably alike. The general character of the cheeks and forehead are the same.

Forensic Artist Stephen Mancusi

Next is the consideration of the overall appearance. "B1" and "B2" are the same person. They look exactly alike. This is a ground ball. As for "B3" when considering the appearance of this subject as it relates to the "B1" and "B2", there is clearly a similar character present. So, it is quite reasonable to conclude that all three subjects in Group 2 are the same individual.

Part Three:

Part three of this analysis addresses the question: Could Subject A be the same person as Subject B? For this comparison, images "A1, A2, A4" and "B1, B2, B3" will be used. Upon examination of these images, it is determined that a good comparison can be done. There are significant facial feature points of reference visible and certain images are in similar camera perspective. However since the subjects are at different ages, some age progression trends will need to be considered.

A proportional registration and alignment was made between "A2" and "B1". These two images are the closest camera perspective match (*see illustration 5*). "B1" was the base image. Red markers have been placed on various proportional reference points that were derived from "B1". These exact same points have been overlaid on "A2". Clearly, there seems to be a remarkable proportional similarity between many of the subjects' points of reference. Yet, Subject A's head is a bit narrow compared to Subject B. This is easily explained by the natural weight gain as a person ages. Another element that is expected to differ due to natural aging trend is the hairline. Subject B's hairline is higher than Subject A which is consistent with age. However, one proportional point does not align. The length of Subject B's ears are clearly longer then Subject A. Though a man's ears will get larger as they age, this difference appears outside an expected range. Fortunately in two of the other images "A4" and "B3" the ears are more visible. So an additional examination of this feature can be addressed later in this analysis. The iris circumference for both subjects is the same and both men exhibit large irises (see red circles in illustration 5).

On examination of the individual facial characteristics, many similarities are seen (see illustration 6). Both subjects' eyes exhibit similar shaped upper lids. The upper lids are thick on both subjects. This thickness is exhibited as a continuous shadowed line directly under the lid adjacent to the ball of the eye. They both squarely angle downward on the ends (see red arrows A). Though the eyes on "B1" and "B2" have a more drooping appearance, this is attributed to age. The lower lids also depict a consistent character (see red arrows B). Subjects A and B have large irises. The bags or puffiness under the eyes are clearly similar, but again more prevalent on the older subject B (see red arrows C). The noses exhibit a similar character with distinct bridges, a full nose tip ball and fleshy nostrils. Yet, Subject B's nose is slightly more bulbous. This can be explained by natural aging trends. Both noses angle slightly to the subjects' right side. The smile lines are guite similar on the men. "A1" clearly shows a distinct scar on the subject's left smile line. On the images "A2", "B1" and "B2" the scar is seen as a slightly lighter toned mark. This may be the result of lighting differences, fading, image quality, or techniques for removing unwanted blemishes. Yet the scar is still faintly visible on all the images (see red arrows D). The mustaches on "B1", "B2" and "A2" are similar in shape and texture consistency. The men's beards encroach onto the cheeks in a similar fashion and delineate a long narrow appearance to the face. The evebrow shapes are reasonably consistent, except Subject B has thicker evebrows which would be in-line with aging. The eyebrows of both men exhibit a strong contrast value distinction as opposed to the skin tone. Both men have a similar forehead structure. Their hairlines, hairstyle and hair texture are reasonably alike. However, there is a discrepancy between the ears. The "B1" ear shape which is long and pinned close to the head seems to be in contrast to the shape of the ears in "A1" and "A2". Since the position of the man in "B2" is slightly angled to the subject's right side, the left ear shape offers a slightly closer match to the shape of the ears on "A1" and "A2".

As stated earlier, a closer examination of the structure of the ears of Subject A and Subject B can be made. For this ear comparison, a close-up cropped area of images "A4" and "B3" will be used (*see illustration 7*). The quality of both images is poor, but enough information is visible for some level of comparison. It was already

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noted that the length of Subject A's ear was shorter than that of Subject B. This aspect could be the result of aging. The upper helixes of both subjects' ears have a similar oval curve (see red arrows A). Following the helix downward they both fan out as they become part of the ear lobe (see red arrows B). The ear lobes of both men seem to be partially dangling. The antihelixes display a similar shape. Both antihelix top portions widen and have distinct triangular fossa notches (see red arrows C). The bottom portions of the antihelix of both ears have similar inward flow at the antitragus (see red arrows D). The general shape of the concha is consistent on both of the men (see red arrows E). There appears to be a significant resemblance between both men's ears, unfortunately because of the quality of the images this resemblance remains in the realm of possibility.

When comparing the overall character and appearance of Subject A and Subject B, a consideration of age progression trends is required. Having noted this, a resemblance is still fairly visible. Most of the dissimilarities could be explained by aging. So could these men be the same person? Considering all the similar results of each phase of this part of the analysis, it is certainly in the realm of possibility up to a level of likely that Subject A and Subject B are the same man.

Part Four:

The last part of this analysis is the most significant. Is the man in the middle of the top row in the 1846 daguerreotype possibly the same man as Subject A or Subject B? For this part of the analysis three images will be used. They are "A4", "B2" and "Subject C". Subject C has been horizontally flipped because daguerreotype images are mirror images of the actual subject (*see Subject C*). It should be noted that Subject C is positioned with a slight turn to the subject's left side. Image "A4" is in a similar perspective. Unfortunately "B2" is in a similar perspective but in the opposite direction. Additionally the quality of the Subject C image is not good which will also impede certain aspects of the comparison. However, it is determined that a significant amount of reference points are visible and some level of comparison can be made.

An acceptable proportional alignment and registration was achieved with all three images. Yet, "B2" was required to be horizontally flipped for the aforementioned reason (see illustration 8). Subject C is the base image. The proportional reference points were derived from the base image. These points are delineated as the red markers seen on Illustration 8. The exact same markers have been overlaid on "A4" and "B2". The following is the analysis. Some of the basic proportional reference points such as the length and width of the nose and the location and width of the mouth aligned well among the subjects. Plus the widths of each of the subjects' eves also appear similar. The placements of the evebrows are within an acceptable range. Subject C's face is fuller and the beard does not encroach on the face as much as that of Subjects A and B. This may be a result of a heavier Subject C. Yet, Subject B is heavy as well and still maintains a narrow appearance. A narrower face is a characteristic of Subjects A and B. Additionally, the width of the cheek bones seem wider on Subject C than Subjects A and B. Subject C also exhibits a wider forehead structure then Subjects A and B. As demonstrated on illustration 8, the width of Subject A's and Subject B's cheekbones and forehead are marked in green. The green markers where derived from "A4" and these exact markers were overlaid on "B2". The large iris circumference of "A4" and "B2", which is delineated with red circles on illustration 8, clearly exposes the smaller iris of Subject C. This is a significant dissimilarity and cannot be easily dismissed. If the quality of the dag image was better, this would be an exclusionary point of dissimilarity. However it behooves the analysis to continue to the next set of comparison issues.

The examination of the individual facial features has the following results (*see illustration 9*). When comparing the eyes of Subject C and Subject A, there are clear dissimilarities. Subject C's eyes appear slightly narrower and the upper lids gradually slope downward. These traits are in direct contrast to the rounded curvature of the upper lids of Subject A (see red arrows A). Though the upper lid structure of Subject C seems slightly similar to Subject B, it is this similarity that is problematic. Subject C is much younger than Subject B. Subject B's downward sloping eyes are a result of age but the upper lids still exhibit

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a sharper angle downward on the outside. Subject C's downward sloping upper lids are a distinct characteristic. Subject C's eves would be expected to age progress with a greater downward slope and a narrower appearance. Additionally, Subject A's and Subject B's lower lids appear as distinct thin shadows following the curve of the eveball. Subject C's lower lids depict a different structure (see red arrows B). As mentioned. Subject C's irises are smaller than those of Subject A and B. The general nose structure appears similar among all the subjects. However the ball of the nose on Subjects A and B is slightly fuller. Plus Subject C's nose does not appear to angle to the right side as does that of Subjects A and B. The mouths of Subjects C and A are not the same. Both subjects possess a philtrum but its effect on the upper lip line is different. Subject C exhibits a wider "V" shape as opposed to the smaller sharper "V" shape on Subject A (see red arrows C). Additionally, both lips are about the same thickness on Subject A. Yet, Subject C's upper lip is thinner than his lower lip (see red arrows D). Subject C's smile lines are not as distinct as those of Subjects A and B. Subject C does not appear to have a scar on his left smile line (see red arrow E). The style and shape of Subject C's beard does not accentuate the narrower face structure as do the beards of Subjects A and B. This may be a result of shaving preferences. However it is noted that even considering the age difference between Subjects A and B, there is still a consistent shaving preference maintained over this time. The hint of a bag or puffiness under the right eye of Subject C is positioned lower than the bags under the eves of Subjects A and B (see red arrows F). This would be in contrast to general aging trends. The eyebrows of Subjects A and B display a clear value contrast distinction. Those of Subject C do not but this could be partly due to the lighting or the photographic process. The overall face and head shape of Subject C appears to be rounder and wider than that of Subjects A and B. However Subject C's fleshy cheeks have a slight resemblance to the older Subject B.

When the overall character and appearance is compared between Subject C and Subject A, no resemblance is apparent. These two individuals generally look like different people. Even considering the subjects' weight differences, weight loss does not affect the underlining bone structure or the other dissimilar facial characteristics such as the iris size. However, Subject B's older age allows greater latitude for an overall visible resemblance between Subjects C and B. This latitude exhibits a slight resemblance. Yet many of the similar characteristics are in contrast to the basic aging trends that would be expected.

Concluding Opinion:

As for the question: Is the man in the middle of the top row of the 1846 daguerreotype (Subject C) possibly the same man as "Subject A" or "Subject B"? The comparative evidence revealed in this analysis points out many differences. So, it is highly unlikely almost to the point of exclusionary that Subject A and Subject C are the same individual. There were a few similarities between Subject C and Subject B. However none so convincing that they override the dissimilarities especially since the irises seem to be different sizes. Due to these revealed inconsistencies, it would be highly unlikely that Subject C is the same man as Subject B. This analysis has revealed a much greater possibility that Subjects A and B are the same person. Considering the totality of this report, there is one possible conclusion that might be inferred from these results. Alexander Cartwright could be anyone of these men or even two of them. It appears highly unlikely that he could be all three of them.



c1846 Daguerreotype Image

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Forensic Artist Stephen Mancusi

Group 1 Subject A









A1



Α4

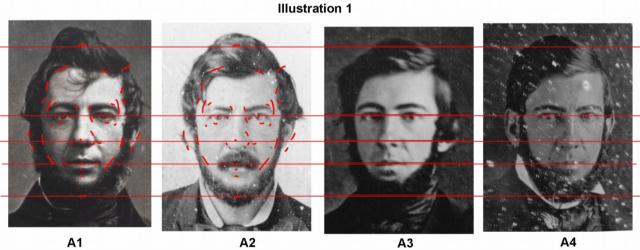
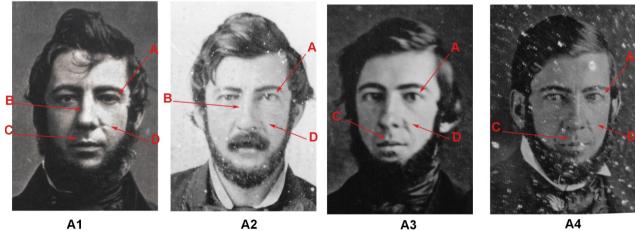


Illustration 2





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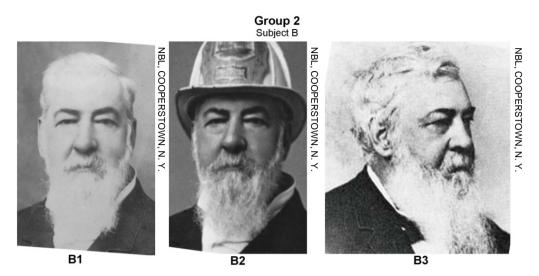
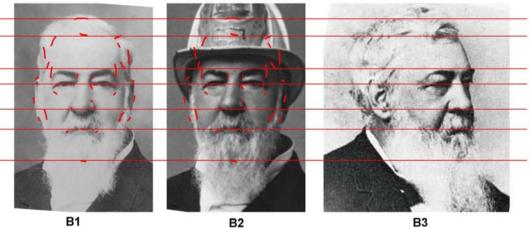


Illustration 3



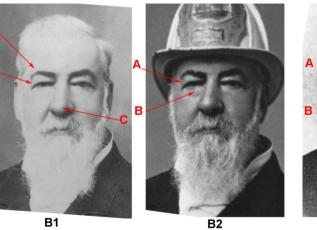
B1

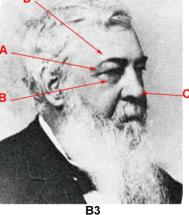
D

A

B2

Illustration 4



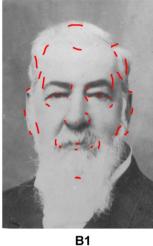


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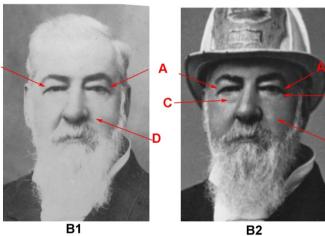
Illustration 5





Α

Illustration 6



в n A2 A1

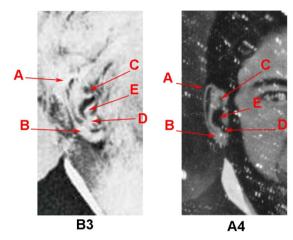
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в

D

Illustration 7



Subject C Dag subject in question horizontally flipped





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Illustration 8

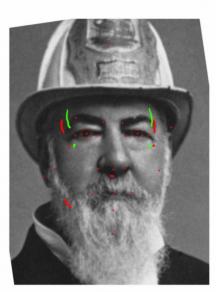


Subject C

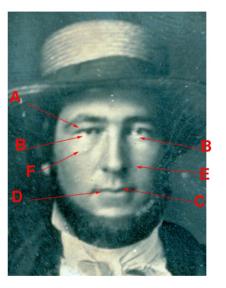


A4

Illustration 9

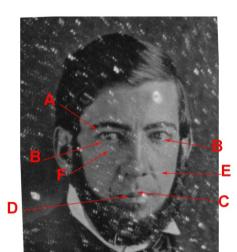


B2 Horizontally Flipped

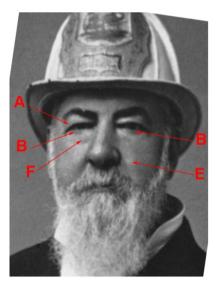


Subject C

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Subject A



Subject B smancusi@forartist.com

Editor's Note: This concludes Mr. Mancusi's analysis and opinion.

GERALD B. (JERRY) RICHARDS is currently an examiner of questioned documents and photographs under the business name of Richards' Forensic Services. Jerry graduated with a B. S degree in 1966 and M. S. in Ed degree in 1967 from Southern Illinois University. Until his retirement at the end of 1993 he was a Special Agent with the FBI for 23 years. Upon completing Agent training Jerry was assigned as an investigator in the Atlanta and Baltimore Divisions of the FBI. He then was transferred to the FBI Laboratory and received 3 years of training in document and photographic examinations. A third area he specialized in while in the Laboratory was espionage tradecraft. In 1991 he received the National Intelligence Medal of Achievement from the National Foreign Intelligence Community for especially meritorious conduct in the performance of outstanding service by a member of the intelligence community. After working as an Agent examiner for a number of years Jerry was promoted to Unit Chief of the Document Operations and Research Unit and then later transferred to the Special Photographic Unit as Unit Chief. Both Units were part of the Document Section of the Laboratory. Jerry has testified in many cases in federal, state, local and foreign courts and court martial proceedings. A number of the cases he has worked, and/or testified in, have been high profile matters, such as the John Walker and Jerry Whitworth espionage case, Bell/Zacharski espionage case, Rick Ames espionage case, Jonathan Pollard espionage case, Ronald Pelton espionage case, the O. J. Simpson civil case, the JFK/Marilyn Monroe forgery case, Twilight Zone (the movie) case, and many others. In addition to case work, for ten years Jerry taught a three hour graduate level course on Questioned Document Examination and one on Forensic Photography at The George Washington University in Washington, DC. He currently teaches a three hour distance learning course on the Technical Aspects of Questioned Document Examinations for Oklahoma State University.

Jerry is an American Board of Forensic Document Examiners (ABFDE) Diplomat and is past member of the Board of Directors.. He is a fellow in the Document Section of the American Academy of Forensic Sciences (AAFS), and is a past Section Secretary. He is also a past member of the Academy's Board of Directors. In addition to a number of other organizations, he is twice past president and a member emeritus of the Mid-Atlantic Association of Forensic Scientists (MAAFS).

RICHARDS FORENSIC SERVICES

EXAMINER OF QUESTIONED DOCUMENTS AND PHOTOGRAPHS

15307 Alan Drive, Laurel, Maryland 20707 301-725-3778; Fax 301-725-1714 March 30, 2011

Mr. Corey Shanus

REFERENCE: Your e-mail letter dated February 4, 2011.

LABORATORY FILE NUMBER: A11004P.

ITEMS RECEIVED: Via United Parcel Service (UPS), February 5, 2011.

REPORTS AND OTHER SUBMITTED ITEMS:

A-1 A preliminary article for the SABR Pictorial History Committee Newsletter-Supplement. The article is written by Mr. Mark Fimoff and contains a report by Mr. Stephen Mancusi, Forensic Artist. The article and report opine regarding the identity of a purported Mr. Alexander Joy Cartwright, Jr. in the questioned image, as compared to several purported known images of Mr. Cartwright. In order to reduce confusion only the images herewith received, that are comparable to those used by Mr. Mancusi, will be used for the examination in my report. In addition, the same nomenclatures used by Mr. Mancusi will be used throughout this document.

QUESTIONED IMAGE:

(C) An approximately 8" x 12" photographic print copy of a c1846, half-plate daguerreotype purportedly depicting six members of the Knickerbocker baseball team, including Alexander Joy Cartwright Jr. in the top row, center.

In addition, a high resolution digital image of the same daguerreotype was downloaded from: <u>http://rcpt.yousendit.com/1040331235/6a8856bc239232e68d420fe34ebf52dl</u> This file is 147.6 megabyte (M) in size, which suggests it was originally scanned at approximately1200 pixels per inch (ppi).

KNOWN IMAGES:

Photographic print copies were received of Al, A2, A4, B1 and B2, as described in Mr. Mancusi's report. No photographic copies of A3 or B3 were received or used.

REQUEST: Review the report of Mr. Stephen Mancusi to determine if I agree or disagree with the specific methods and techniques used in conducting his examination, and, are these methods and techniques accepted within the forensic science community. In addition, do I agree or disagree with Mr. Mancusi's final conclusion.

RESULTS OF EXAMINATIONS:

Conducting a Facial Image Comparison:

A facial image comparison, as well as any other portion of the human body, from either traditional photographs or digital images, is a side-by-side comparative process. One of the first rules is that only the same things can be compared. For instance the right side of a face cannot be meaningly compared to the left side of the face, since almost all faces are non-symmetrical. It must also be remembered that the face is an extremely dynamic portion of the body containing dozens of muscles that can significantly change its appearance in an instant. Even the raise of an eye brow, reflected at the instant of capture, can make an image comparison problematic.

Some additional things that must be considered when comparing questioned to known images are image resolution; temporal order of the images; dynamic range of the lighting; angle of lighting; contrast; shadows; reflections; color sensitivity of the recording media; image scale; camera angles; focus; depth of field; perspective; retouching; etc. Also to be considered are personal factors regarding the subject of the image. These include, but are not limited to, weight gain or loss, illness, accidents, surgery, age progression, significant climate changes, etc.

It is rare that a positive identification can be made through image comparison. There is a major difference between recognition and identification. Recognition does not mean identification and is the reason for many mis-identifications. An examiner always has to consider the problem of identical twins, however, it is really a much broader problem than just twins. Many, many people who are complete strangers look very much alike, particularly when their three dimension faces are reduced to two dimensions, and then further reduced in image quality. The term used for these look-a-likes is "doppelgangers."

There are two basic types of characteristic that are the foundation of this, and most types, of comparative examination. The first is class characteristics. These are the general facial features, such as race, gender, hair, hair lines, facial width, facial height, nose, eyes, etc. If these features are exact, or even close, the examiner can progress to the next stage. If there are gross differences, and there is no mitigating reason for the differences, then an elimination may be justified.

The examination then progresses to the second stage, evaluating individualizing characteristics. These are characteristics produced by time, wear and tear, disease, genetics, etc. A few of these individualizing characteristics are ear patterns, scars, pock marks, chipped teeth, worts, moles, freckles, acne, facial lines, etc. It must be remembered that the timing of the images is most important. For instance, the presence of acne in the same location on two images taken six months apart is extremely significant, leading toward identification. However, the absence of the acne in one of the images is meaningless, and should have little or no significance regarding an identification or elimination. Time heals many things. The only way to positively identify two

facial images, as being the same person, is to have sufficient and significant individual identifying characteristics that are demonstrative.

A positive identification can be attained given the same class characteristics, and sufficient individualizing characteristics, not only by themselves, but relative to one another. Class characteristics and the absence of sufficient demonstrative individualizing characteristic can only lead to an inconclusive opinion. Any major difference in class characteristics or difference in specific individualizing characteristics, such as different ear patterns, should lead to an elimination.

Report of Mr. Stephen Mancusi:

In viewing Mr. Mancusi's biographical statement it appears he is a highly trained forensic artist with many years of professional experience in law enforcement. The report prepared by Mr. Mancusi is a logical well prepared professional document that reflects his examination process and findings in a orderly progression. I believe Mr. Mancusi to be a qualified professional forensic artist.

Although I agree with many of the observations and general conclusions made in Mr. Mancusi's report (the report), I do question some of the procedures used for comparison, and can not concur with his final opinion.

The report is subdivided into four parts. The first is an inter-comparison of four, generally speaking young men, designated A1 through A4. The second part inter-compares three, generally speaking, old men, B1 through B3. Part three inter-compares A1 through A4 with B1 through B3. The report provides no external provenance or authentication of any of these images being that of Alexander Joy Cartwright, Jr. (AJC), with the exception of a mention by Mr. Fimoff of B1 being identified as Cartwright in a 1892 newspaper. A1 was used as the base image for overlays which comprised the method of relative scaling and comparison of each image. Therefore, it appears the purpose of these first three parts of the report was to establish the seven images, through inter-comparison, as a set of "known exemplars". Part four then compares the seven images for part one through three to the questioned "C" image.

This seems somewhat problematic since in, most cases, a questioned image should be compared with an established set of known exemplars. Or if a set cannot be established, then each "known" image should be independently compared with the questioned image. Although it is prudent to inter-compare known specimens to determine if any gross error has occurred in their selection, it is not a normal practice to take an unknown set of images and inter-compare them to form a set of known standards for further comparison with yet another unknown image.

Part One:

In the first part of Mr. Mancusi's inter-comparison a number of subjective class, or general characteristics are identified and explored. I concur with most of Mr. Mancusi's interpretations of these characteristics, described as "comparable", "are consistent", "similar in size", etc. However, I must take issue with one of the individualizing characteristics mentioned, "the scar on the left smile line". In Al there most definitely appears to be a scar in the smile line. This is illustrated by

the shadow created at the top of the scar, and a highlight on the bottom of the scar, which appears to be created by the main (key) light source. However, in all of the other images the shadowing and placement are questionable at best, and in the A4 image it appears to be a combination of dust and scratches. What appears to be the upper shadow in A4 curves upward considerably, as compared to the A1 image.

In addition, with the exception of A2, the other three images have a main light source (key light) on their left side, highlighting the left side of their face and throwing the nose shadow to the right smile line. They have a relatively high contrast between the shadows and highlights. A2 is lit from the right by the key light, however, the relative contrast range is low, probably from a fill light, showing much more information on both sides of the nose.

The conclusion reached Mr. Mancusi regarding Al through A4 is "It is highly likely that the subjects of these four images are the same individual." I would have to temper this statement by saying that it is possible that these four images are the same individual.

Part two:

The second part of Mr. Mancusi's inter-comparison similarly compares the B1 through B3 images and continues to compare a number of subjective class characteristics. Since it appears that B1 and B2 were probably photographed during the same sitting, on the same day, I would expect little variation. B3, is a three quarter view which greatly reduces the information for comparison. Due to extensive facial hair, a vast age difference, lack of well defined individualizing characteristics and the possibility of retouching, the B1 through B3 images have little value, in my opinion, for comparison with the questioned image. Or for that matter with the Al through A4 images. Lastly, in comparing many of the proportional points (class characteristics) the term "exact match" is used to describe the results of the comparison. I submit that this term is somewhat misleading and perhaps should be replaced by "similar to" or "consistent with", since this determination is somewhat subjective.

The conclusion reached by Mr. Mancusi regarding B1 through B3 is "So, it is quite reasonable to conclude that all three subjects in Group 2 are the same individual." I could agree with this statement.

Part three:

The third part of Mr. Mancusi's report is a comparison between A1 through A4 and B1 through B3. He notes that there is a "...discrepancy between the ears." when comparing Subject A and Subject B. The result of this inter-comparison is as follows:

"When comparing the overall character and appearance of Subject A and Subject B, a consideration of age progression trends is required. Having noted this, a <u>resemblance</u> is still fairly visible. Most of the <u>dissimilarities could be explained by aging</u>. So could these men be the same person? Considering all the similar results of each phase of this part of the analysis, it is <u>certainly in the realm of (possibility up to a level of likely</u> that Subject A and Subject B are the same man." (Italic & underline emphasis)

This is problematic because these two groups of images have now, in essence, been associated as the same person, based for the most part on class, or general, characteristics.

Part four:

The fourth part of the report is a comparison of only two of the seven inter-compared images, declared as a single known individual, Alexander Joy Cartwright, Jr., to the questioned individual in image, "C". These two images are A4 and B2.

Regarding the comparison with B2, I am somewhat perplexed at the following:

"It should be noted that Subject C is positioned with a slight turn to the subject's left side. Image "A4" is in a similar perspective. Unfortunately "B2" is in a similar perspective but in the opposite direction."

"An acceptable proportional alignment and registration was achieved with all three images. Yet, "B2" was required to be horizontally flipped for the aforementioned reason (see illustration8)."

Generally speaking, faces are asymmetrical. By horizontally flipping B2, the right side of the subjects C and A4's face is being compared with the left side of subject B2's face. I do not believe this is an acceptable manner in which to conduct a comparison, even if for class, or general, characteristics. Although this may be convenient, and perhaps look better, the fact is different parts of asymmetrical faces are being inter-compared.

The overall result of the fourth part of the report is that there are several class, somewhat subjective, general characteristics which have be deemed differences. It appears there are only three characteristics that can be considered as individualizing. These are as follows:

1) The nose is somewhat off-center, to the subjects right, in some of the seven intercompared images, as compared to subject C.

2) In some of the inter-compared images a horizontal scar is seen beginning at the laugh line on the subjects left cheek, particularly A1, as compared to subject C.

3) The irises of the eyes in the inter-compared images are significantly larger than the irises of subject C.

This last characteristic is perhaps the most significant based on the following statement:

"The large iris circumference of A4 and B2, which is delineated with red circles on illustration 8, clearly exposes the smaller iris of Subject C. This is a significant dissimilarity and cannot be easily dismissed."

Concluding Opinion:

Mr. Mancusi's opined as follows:

"The comparative evidence revealed in this analysis points out many differences. So, it is highly unlikely almost to a point of exclusionary that Subject A and Subject C are the same individual. There were a few similarities between Subject C and Subject B. However none so convincing that they override the dissimilarities especially since the irises seem to be different sizes. Due to these revealed inconsistencies, it would be highly unlikely that Subject C is the same man as Subject B. This analysis has revealed a much greater possibility that Subjects A and B are the same person. Considering the totality of this report, there is one possible conclusion that might be inferred from these results. Alexander Cartwright could be anyone of these men or even two of them. It appears highly unlikely that he could be all three of them."

Report of Gerald B. Richards:

This examination was conducted from a high resolution digital image of the questioned c1846 half-plate daguerreotype purportedly depicting six members of the Knickerbocker baseball team, including Alexander Joy Cartwright Jr. in the top row, center. The image was downloaded from: <u>http://rcpt.yousendit.com/1040331235/6a8856bc239232e68d420fe34ebf52dl</u> The file is 147.6 megabyte (M) in size, which suggests it was originally scanned at 1200 pixels per inch (ppi).

Images provided for comparison are photographic print copies of A1, A2, A4, B1, B2 as described in Mr. Mancusi's report. No photographic copies of A3 or B3 were received or used. Initial examination of B1 and B2 strongly suggests that these images were produced at the same time and place. As previously stated, due to the extensive facial hair, a vast age difference, lack of well defined individualizing characteristics and the possibility of retouching, the B1 and B2 images have little value for comparison with the questioned image and were not used for the remainder of this examination. Therefore, the examination consists of a comparison of images A1, A2, and A4 which are the most contemporaneous with image C. These images are chronologically ordered as follows:

С	1846	Daguerreotype
A1	1855	Daguerreotype
A2	1860	Ambrotype
A4	????	Daguerreotype

It should be noted that there is an approximate nine (9) year difference between C and A1, and an approximate fourteen (14) year difference between C and A2.

Exhibit #1, is a high resolution image of just the questioned face in C. It will be used as the base reference for the remainder of this examination. Due to many factors, such as rotation of the head, varying facial movements, shadows, resolution, and no exactly defined points of reference, only an approximation can be made relative to scale. Exhibits #2, #3 and #4 have been scaled relative to each of the images within, by attempting to match the inner and outer corners of the eyes.

An overall examination for general class characteristic was then conducted. There is considerable variation between all four images when considering any single feature, such as the nose, lips, eyes, eye brows, etc. However, nothing of significance was noted that would exclude any of the images as being the same person. Exhibit B shows the vertical relationship of prominent portions of all of the scaled faces, similar to Mr. Mancusi's Illustration #1. The vertical alignment is sufficiently \cdot close to indicate all four individuals could be the same person. Overall, there are no class characteristics that would categorically eliminate any of the four individuals as a different person or persons.

As previously mentioned, there are three individualizing characteristics that appear to be the foundation of Mr. Mancusi's report. Because of their importance they are repeated here again as follows:

1) The nose is somewhat off-center, to the subjects right, in some of the seven intercompared images, as compared to subject C.

2) In some of the inter-compared images a horizontal scar is seen beginning at the laugh line on the subjects left cheek, particularly A1, as compared to subject C.

3) The irises of the eyes in the inter-compared images are significantly larger than the irises of subject C.

Although the off-center nose and scar are factors to consider, they must be considered in relation to the time line of the images. The perceived absence of these features in the first image, C, has little significance, since at any time during the following nine (9) years, the off-centered nose and scar could have been produced through any type of accident, or number of accidents. The presence of the off-center nose and scar in C would certainly have been significant, however, their absence has little significance due to the order and timing of the images. Also, the slight left rotation of the head in C may somewhat mitigate an off-centered nose.

In addition, a number of other factors can come into play when examining these images. As previously noted, in closely examining Exhibit #3 it can be seen that the main (key) light is from the upper right in C and A2, while it is from the upper left in A1 and A4. Although the main light is from the right in C and A2, it should be further noted that there is a considerable difference in the highlight to shadow ratio which suggest more of a fill light present in A2. When examining the purported scar in this Exhibit it can be readily observed in A1 and is questionable, at best, in A2 and A4. When Exhibit #1 is examined closely no scar can be detected on the left laugh line, however, due to the deep shadow on the left side of the face, neither can the left laugh line itself be detected. As a matter of fact little to no real detail can be seen on the left side of the nose in C, which may also be due to some retouching. Therefore, again the scar has little to no significance regarding this examination.

Lastly, but perhaps most importantly, is the conclusion by Mr. Mancusi that the irises of the eyes in the seven inter-compared images are significantly larger than the irises of subject C. Exhibit #4 · illustrates just the eyes of all four images, scaled as close as possible. The human eye is composed

of the sciera (white portion), iris (colored portion) and pupil (black portion). The average eye is approximately 25mm, while the iris averages between 10mm and 13mm in diameter, and of course the pupil varies with the amount of light. Another problem that should be noted is that the iris is not always circular. Measuring the iris with any degree of accuracy can be problematic. The color of the eye will also effect its appearance in a photograph, depending on the spectral sensitivity of the photographic emulsion. For instance most emulsions of this period were blue sensitive and had little to no sensitivity to the warmer colors such as yellow or red. Therefore, a person with irises that were very blue would appear lighter, and therefore blend more with the sciera, than a person with brown or darker irises.

In Exhibit #4, all four of the images appear to have the same approximate density, or darkness, in the iris. In addition, all of the irises appear to be the same approximate size. When the irises in C are examined closer, two white "catch lights" can be seen, reflections from the subjects right, along the edge of the lower corner of the iris (see two red arrows on Exhibits #1 & #4). When seen on an image of lesser quality, these catch lights would appear to be part of the white sciera, and not the iris, making it appear that the iris is smaller. However, this anomaly can be plainly seen in both Exhibits #1 and #4.

Concluding Opinion:

The triad in which any authentication should be based is the combination of Provenance (history and documentation), Connoisseurship (the subject matter experts opinion) and Scientific Examination (observable materials and facts, consistent or non-consistent, with the premise at hand). As with most intellectual property examinations involving photographic facial comparison it is rare to positively identify an individual in question, it is more common to eliminate an individual, and in the great majority of cases, an examiner can only provide varying degrees of support for the questions being asked.

Based on my examination of the Al, A2 and A4 images, as compared to the C image, it was not definitely determined if the individual in C is or is not the same individual as in Al, A2 and A4. Furthermore, I could find no significant class or individualizing characteristics that would indicate, with any degree of certainty, that all four images could not be of the same person at various points in time. Based on this examination alone, I could find nothing of significance that would suggest or indicate that the individual in C could not be Alexander Joy Cartwright, Jr.

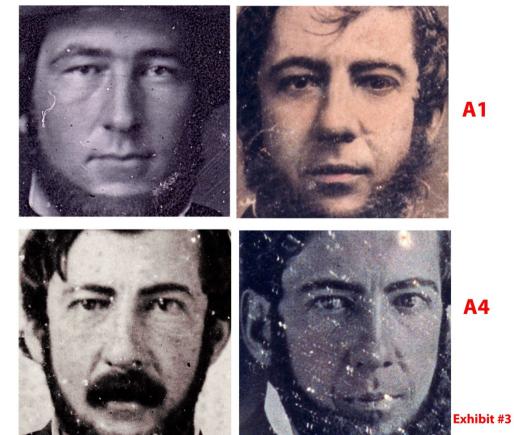
All of the submitted materials in this matter are being returned herewith. Portions have been scanned or copies.

Gerald B. Richards

Enclosures: Curriculum Vitae Article, Papers Presented, Lectures & Meetings (Partial List) Trial/Deposition Testimony List



"C"



"**C**"

A2



"C"

Exhibit #2



"C" A1 A2 A4



Editor's Note: This concludes Mr. Richard's analysis and opinion.

Editor's Response

For my expert I chose a forensic artist because I found that much of the accessible material on facial comparison was authored by practicing forensic artists. Also, a career that has been focused on faces is essential. There is no substitute for the decades of repetitive intense exposure one gets as a career forensic artist working for a major metropolitan police department. There are perspectives that can only be gained by examining thousands of faces which will escape the purview of one who only occasionally does facial comparisons.

Mr. Mancusi's background includes decades of facial comparison experience, including frequently comparing faces in photos of varying quality, lighting, angle and facial expression as well as evaluating facial changes over varying periods of time. Forensic artists who have been formally educated in the rendering of human faces have particular expertise as to how lighting, look angle, and expression affect the appearance of facial features. They obviously also understand the asymmetrical nature of human faces. Mr. Mancusi's judgment is based on the evaluation of literally many tens of thousands of faces in his career. Testifying in court and advising investigators about such issues is his profession. His initial questions mirrored what any expert would ask – Can I see the actual images in hand?¹ Are there reliable dates for the images? When was AJC born?

In his report Mr. Richards states, "during the following nine (9) years, the off-centered nose [of subject A]...could have been produced through any type of accident, or number of accidents." Yet we have no "family story" of what would have been a significantly painful event. Interestingly, in his appearance in "Jesse James, Outlaw or Terrorist" on The Discovery Channel, Mr. Richards compares the nose in a c1874 photo of Jesse James to the nose in a photo of a 102 year old man taken c1949 (75 years apart), and as part of an exclusionary analysis concludes that the noses are different. No mention of a possible accident or number of accidents.

Mr. Richards opines, "There is considerable variation between all four images [C, A1, A2, A4] when considering any single feature, such as the nose, lips, eyes, eye brows, etc." However no specific variations in these features among the subject A images are pointed out. In Mr. Mancusi's analyses, very specific similarities among these subject A features are pointed out, similarities not shared by subject C.

Mr. Richards states, "each 'known' image should be independently compared with the questioned image." He asserts that it is necessary to not only compare A4 directly to C, but to also individually compare A1, A2, and A3 to C. But he does not state what difference he thinks that would make - what features of A1, A2 or A3 would compare more favorably to C? All the A's have virtually the same forehead width, so it suffices to then compare only one of them directly to C. The same can be said for the particular characteristics of the eyelid, lips/philtrum, and nose.

Mr. Richards states, "Generally speaking, faces are asymmetrical...By horizontally flipping B2 the right side of the subjects C and A4's face is being compared with the left side of subject B2's face." However, flipping B2 horizontally does not alter the forehead or cheekbone widths, and the vertical registration does not change. Mr. Mancusi's assessment took into account the face flip, hence there was in fact no left side to right side comparison.

There seems to be a lack of understanding of the plain language of Mr. Mancusi's report. Mr. Richards states, "there are three individualizing characteristics that appear to be the foundation of Mr. Mancusi's report." Specifically he refers to the off-center nose, the lack of a scar, and the iris size. That does not accurately reflect Mr. Mancusi's position. It is clearly asserted that taken as a whole, the described numerous feature differences (including nose ball, upper and lower eyelids, lips/philtrum, forehead and cheek bone width, iris size) and subjective look indicate that that A and C are highly unlikely to be the same person. Specifically, after summarizing these differences Mr. Mancusi states, "The comparative evidence revealed in this analysis points out many differences. So, it is highly unlikely almost to the point of exclusionary that Subject A and Subject C are the same individual."

Note that Mr. Mancusi's conclusion (and mine) is based primarily on individual feature comparison. The issue of subjective look or resemblance is a secondary factor. While Mr. Mancusi points out a lack of resemblance between C and A, he states that there is a slight resemblance between C and B, yet he concludes that they are unlikely to be the same person based on individual feature comparison.

Objective or Subjective

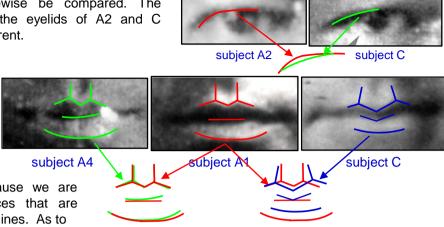
The difference between that which is objective and that which is subjective is often controversial. Some have even argued that the perceived difference between a triangle and a square is subjective. For our purposes, I will call this difference objective. I justify this by noting that when you try to overlay one on top of the other, no matter how you try it, most of the lines comprising each shape remain relatively far apart. A number or metric can be mathematically calculated to reflect this level of difference. That is objective.



Shapes of facial features can likewise be compared. The appearance of the lower edges of the eyelids of A2 and C respectively, **right**, are objectively different.

The same can be said for the respective cupid's bow/philtrum structures and lip shapes, **right**. Those of A4 and A1 overlay very closely. When comparing A1 and C, the difference is objectively evident. The difference at the end of the nose can also be argued to be objective,

though it's a bit more difficult because we are comparing compound curved surfaces that are somewhat less amenable to simple outlines. As to



forehead width and cheek bone location, Mr. Mancusi provided an estimate based on decades of experience and a knowledge of facial skeletal anatomy. These aspects of facial width are rooted in skull structure and are thus *unaffected by weight*. Objective or subjective? – it's fair to say that it's both. Mr. Mancusi's mostly objective near exclusionary conclusion includes a small degree of very educated subjectivity. Of course there is an objective test – see how many photos of the same ballplayer you can find that have feature differences like those of A and C.

Significance of the Differences Between Subjects A and C

Next we address the significance of these observed differences. The feature differences pointed out by Mr. Mancusi are considered significant by the existing literature and common teachings and practice by experts.²⁻⁴ Mr. Richards tells us that they are not significant, but, as to any of the specific feature differences (except for the bent nose), he does not tell us why. He makes only generalized comments. We often hear such generalized comments in order to justify an assertion that two differing images depict the same person. The reasons given are endless, but they nearly always lack specificity, i.e. specific cause affecting the appearance of a specific feature.

Can We Believe Our Eyes?

Though some specific retouching has in fact been identified on portions of these images, no specific retouching was pointed out with respect to the features in question. And, it would have taken more than a bit of hand-tinting to account for the differences seen here.

As to lighting and head angle, again there is no explanation given as to of how this would cause the observed feature differences. It is as if the differing light sources or small differences in head angle exhibited in these photos would magically change the apparent shape of numerous key features in a way we could not understand. However, the differences seen here cannot just be dismissed as illusions. If that contention is true, we should easily be able to find such multiple feature differences among clear photos of the same player from the many thousands of available early ballplayer images. I contend that such a find would be at least extremely rare.

Expression

As to facial expression, Mr. Richards states, "The face...can significantly change its appearance in an instant. Even the raise of an eye brow, reflected in the instant of capture, can make an image comparison problematic." However, there are no raised eyebrows, smiles, grimaces, or other particular expressiveness evident in any of these images. Expressionless faces were common in photos from this era. Daguerreotypes were generally time exposures and holding anything but a relaxed expression would be difficult. Any momentary movement or change in expression that was not held would either be invisible or result in blurring (the short guy in the back row of the HPD is blurry – he did not hold still). Like nearly all dags of this era, the six men in the HPD have relaxed and virtually expressionless faces. The same is true for subjects A and B. All are very useful for feature comparison.

Changes Over Time

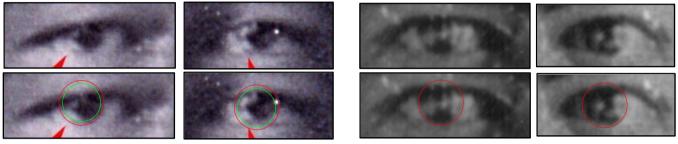
Faces are living tissue, and atypical things can happen - injuries, growths, etc. Examples exist of just about anything. Even horn-like growths occur in humans. Such drastic changes are highly unusual and tend to be disfiguring. In considering the supposed morphing of C into A, only the nose bend and scar hint at disfigurement. The other feature differences are just differences. The question here is what should be expected over the age range of about 25-40. If the A vs. C differences are easily explained by time span, we should be able to find similar multiple feature differences among photos of the same 19thC ballplayer. Try finding such examples.

Irises

Mr. Richards states, "...most emulsions of this period were blue sensitive....a person with irises that were very blue would appear lighter, and therefore blend more with the sciera, than a person with brown or darker irises." The implication seems to be that subject C had blue eyes, and thus iris size determination would be more difficult.

The irises of A1, A2, and A4 are pretty clearly delineated. As these images are from dags, based on Mr. Richards' argument, it seems unlikely that the A's had blue irises. Additionally, AJC's 1849 passport lists "black" as his eye color. This is also probative towards at least a darker non-blue iris color for AJC. So if one contends that C's irises were blue, that would be yet one more reason to question the accepted ID⁵.

Mr. Richards had access to a higher resolution scan of the HPD that was not available when Mr. Mancusi wrote his report. In that scan the iris boundary is somewhat more clearly delineated for subject C. In his report, Mr. Richards states with respect to subjects C, A1, A2, and A4, "all of the irises appear to be the same approximate size." From that I reasonably concluded that this scan of the HPD was of sufficient quality for iris size comparison, regardless of subject C's iris color. If not, Mr. Richards could not arrive at any conclusion. Irises aside, there is more than enough to support Mr. Mancusi's conclusion as to subject C's identity. However I couldn't resist trying this myself with the higher resolution image.



subject C

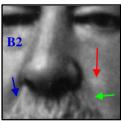


In the images **above** the irises of the higher-res subject C (**left group**) and subject A4 (**right group**) are compared. The eyes maintain the same relative sizing established in exhibit #2 of Mr. Richard's report. The subject A4 rises are outlined in red circles of the same size. C's irises (green circles) appear clearly smaller. The diameter size difference is about 20% (human variability is about 30%). This is a substantial difference - far more than could be accounted for by any possible small vertical registration inaccuracy in either expert's report.

Subjects B1 and B2

As to the comparison of B1 and B2 to subjects A, as indicated in Mr. Mancusi's report, their respective features are consistent with the family story asserting that they are the same person. For example, the upper eyelid angular shape in B1 and B2 matches that of A, but not that of C. Also, although B1 and B2 are clearly heavier than the subjects A, the forehead widths match A, while that of C is wider.

The left smile line scar is evident in *all* of the subject A images¹². Absent evidence of retouching, we expect to see the scar on B2. Close examination of B2, **right**, shows a deep right smile line (blue arrow) but the left smile line is nearly invisible (green arrow). It seems likely that the left smile line has been heavily retouched so as to obscure the scar. In B2 we can also see a bright highlight (red arrow) exactly where the scar should be.



Provenance

The weight given to provenance should be related to the likelihood gleaned from analysis of the photos in question. For a 50-50 call, provenance has clear importance, assuming that it is reliable. Much more so if there are no apparent feature mismatches (as in the Anson photos). However, if the images appear highly unlikely to be the same person due to multiple feature mismatches, then contrary provenance has to carry the ball a very long way. In the end, provenance cannot change an item into something that it is not.

Let's first consider the source of the provenance. I quote from John Thorn's *Baseball in the Garden of Eden*⁶: "The muscle massed behind the Doubleday story after the [Spalding] commission report of 1908 prompted grandson Bruce Cartwright Jr. to launch an equally propagandistic plot that yielded for...[AJC] a plaque in the Baseball Hall of Fame on which every word of substance is false...And, as has recently been demonstrated, in Monica Nucciarone's biography⁷ [of AJC], grandson Bruce [Jr.] inserted fabricated baseball exploits into a typescript of Alex Cartwright's handwritten Gold Rush journal, which contains no baseball remarks and itself has been judged a forgery."

It could be argued that since Bruce Jr. knew his grandfather during his early childhood, he could not have been mistaken about the identity of subject C. At about age twenty, while my grandfather was still alive, I was shown a photo of him as a very young man. I had no idea who it was. A reviewer of this article told me a similar story. In any case, the two SABR historians cited above expressed the opinion that Bruce Jr. was unreliable, not error prone.

In a 1939 article⁸ Bruce Jr. is quoted, "My father [AJC's son Bruce Sr.] said when he gave me the [HPD]...this is your grandfather with some members of the old Knickerbockers." However, a 1909 letter from Bruce Sr. to *Collier's Weekly* writer Will Irwin discussed AJC's personal baseball belongings, citing only club records and a baseball, all having been "lost." The HPD was not mentioned. It is difficult to understand that omission if the HPD actually is a photo of AJC and five other Knicks, thus Jr.'s magazine quote seems inconsistent with Sr.'s letter. I can find no definite reference to that dag prior to its apparent debut in the 1938 letter from Bruce Jr. (Non-specific reference to a daguerreotype or daguerreotypes of AJC were also made by Bruce Jr. in letters in 1935 and 1936.)

A letter dated 4/16/1865 from AJC to former Knickerbocker member Charles DeBost was reproduced in the Nucciarone authored bio. In it he states, "...I heard that a lithograph of the old members of the Knickerbockers was to be published....I will give \$100 or \$200 if necessary toward its publication. My mother has my portrait as I used to be. I will send you a carte de visite as I am..." It seems AJC thought that some sort of composite image was being produced which would contain portraits of the young Knickerbockers. It is more than odd that he would not at least mention the HPD if it in fact included himself and five other club members pictured twenty years earlier. Such an item would be a very significant personal possession, and a photo of that dag would be useful in creating a composite commemorative image. Yet its existence is not mentioned. (A composite commemoration photo had already been produced c1862, but it used images of the men when they were older. AJC was not included).

Are other Knickerbockers present in the HPD? Doc Adams is said by some to be G, and Duncan Curry H (see p. 3 for designations), though apparently no one in the chain of custody except the current owner ever made those claims. One wonders how one could ever tell – if lighting, angle, retouching, or a raised eyebrow can fool us into thinking two faces are different, could they not also fool us into thinking two faces belong to the same person? However, assuming that what we are seeing is not an illusion, both G and H have obvious serious feature mismatches with respect to Adams and Curry⁹. In a 1997 article¹⁰, HoF senior curator Tom Shieber generously calls the Curry and Adams ID's "tenuous". Based on reference images, the other HPD Knick ID's claimed, see [11], are in my view also less than tenuous. Is this a Knickerbocker image? That claim also seems less than tenuous.

Tom also responded to an argument that the "straw hats" worn by all six men make it more likely that these are six Knickerbockers. He did not seem to find this convincing. Let me add that close scrutiny of the hi-res scan shows that while C and E are certainly wearing straw hats, it appears that the rest are wearing cloth hats. This observation is probative only of something we already know, people too often see what they want to see, even if it is not there.

Conclusion

The *only* specific similarities between the A's and C pointed out by Mr. Richards are similar vertical alignment and approximate iris size. Both are commonly shared by different people, and the latter claim requires a liberal interpretation of "approximate." Add in the inconsistent provenance, and what do we have? Not much. And really, what other accepted photo of a famous person is so unlike his other photos? Clear photos that are agreed by experts to depict other nineteenth century luminaries have features that match, regardless of lighting, angle, or expression. No tortured rationale is needed to explain them. For multiple facial features to all change in a very atypical manner over 5-15 years is to say the least highly improbable. Subject C should not be accepted to be AJC

[1] Mr. Mancusi asked if he could see the actual photos in hand. I did not think this would be possible. In hindsight it may have been possible. In any case, there is nothing in the higher-res scan that would have changed his conclusion.

[2] Forensic Art and Illustration, Karen T. Taylor, CRC Press, 2000 [3] http://www.forensicartist.com/features/index.htm

[4] Forensic Art Essentials - A Manual for Law Enforcement, Lois Gibson, Academic Press, 2007

[5] Mr. Mancusi stated, "the eye color of A appears slightly light." He makes no assertion as to iris hue. Since *actual* iris darkness/lightness can be difficult to judge from a monochrome photo, this plays no part in his conclusions.

- [6] Baseball in the Garden of Eden, John Thorn, Simon and Schuster, 2011;
- [7] Alexander Cartwright The Life Behind the Baseball Legend, Monica Nucciarone, University of Nebraska Press, 2009

[8] Baseball In Paradise, Bailey S. Marshall, Paradise of the Pacific, June 1939 (Bruce Jr. had died in March of 1939) [9] Next issue. [10] The Earliest Known Baseball Photograph, Tom Shieber, The National Pastime, 1997.

[9] Next Issue. [10] The Earliest Known Baseball Photograph, Tom Shieber, The National Pastime, 1997.

[11] In John Thorn's book the following additional claims are made for the HPD: *D*-H. Anthony, *E*-W. Wheaton, *F*-W. Tucker. [12] With reference to the apparent scars on the smile lines of subjects A1 and A4, Mr. Richards states, "In A1 there most definitely appears to be a scar in the smile line.... in the A4 image it appears to be....dust and scratches." Careful observation indicates that the "scar" on A4 is *not* dust and scratches and that the markings in A1 and A4 are remarkably consistent. This issue would not have been possible without the assistance of many people, including a few who had no idea what I was up to and a few others who provided small but important pieces of information. Cappy Gagnon provided early encouragement and directed me to Martin Lee Gersey, Director of Security, University of Indiana South Bend, and Tim Stergios, Crime Scene Technician, Security Police Department, University of Notre Dame. They set me on a course that led to me finding Stephen Mancusi. Thanks to PHC chairman Bill Hickman for his considerable patience, support and very constructive criticism. Thanks also to T. Scott Brandon, Matt Fulling, John Husman, Gary Livacari, Rod Nelson, David Nemec, Bill Nowlin, Bob Richardson, Richard Smiley, Steve Steinberg, Barry Sloate, and of course Corey Shanus and Gerry Richards for providing the other side of the argument. John Thorn has been particularly helpful, even though he is aware that I disagree with views on the HPD. Last but most I would like to thank Stephen Mancusi for taking an interest in this project.

If you have a comment on this issue, or a photo or a relevant article that you would like to submit for a future issue, please send it to Mark Fimoff, bmarlowe@comcast.net.

Editor's Note: The response of HPD owner Corey Shanus follows.

HPD Owner's Response

As mentioned, I am the owner of the half plate Knickerbockers daguerreotype (the "half plate") that is the subject of this newsletter supplement. I believe it relevant to set forth the chronology of events by which the respective views expressed in this supplement were developed. Mark's forensic expert. Stephen Mancusi, undertook his analysis, which upon completion was provided to me, along with a report by Mark in which he set forth his reasons why the identification of Alexander Joy Cartwright, Jr. ("AJC") in the half plate was mistaken. I then hired my own forensic expert, Jerry Richards, to review Mr. Mancusi's report and provide his own analysis. Upon completion, Mr. Richards' report was provided to Mark, who then revised his report, in part to respond to Mr. Richards' report. A revision was also made to the Mancusi report (described in detail below). Mark's revised report along with the revised Mancusi report was then provided to me for my response. When completed, it was provided to Mark, who then made further revisions to his report. Mark's further-revised report (the "Fimoff Third Edition") was then provided to me. What then is published in this newsletter supplement is the Fimoff Third Edition, Mancusi's revised report, Richards' initial report and my report, revised to address the changes made in the Fimoff Third Edition. I would like to add that while Mark and I clearly have differing views of the issue at hand, the process between us was open and amicable, and I respect Mark for the gentleman that he is.

Please note that when I refer to images of AJC that have been used in Mancusi's revised report, I will use the same subject identification references (<u>i.e.</u>, C, A1 through A4). In addition, for the reasons stated by Mr. Richards, I will limit my comments to the comparison of Subject C to the A subjects.

Before I address the specific issue at hand – is AJC depicted in the half plate, I would like to address the issue of my impartiality. I recognize that one may reasonably wonder how objective a person can be discussing an item he or she owns. My response to this concern is as follows. I am the owner of the half plate because I believe it depicts AJC along with fellow Knickerbockers. The opposite – I believe AJC is depicted within it because I am the owner – is not the case. To explain, about twenty years ago when I was offered the opportunity to purchase the half plate along with other photographs of AJC (including a quarter plate daguerreotype (the "quarter plate") and a sixth plate daguerreotype (the "sixth plate")), I noticed that the person in the center back of the half plate identified as AJC (Subject C) did not stand out as being the person identified as AJC in the quarter plate (Subject A1). Though I did notice a much closer resemblance when comparing Subject C to the person identified as AJC in the sixth plate (Subject A4), the perceived differences between Subjects C and A1 caused me concern. I was therefore given a period of time to do my due diligence before I was contractually obligated to tender any money for any of the items. If within that time period I for any reason desired to void the transaction, I could do so with no financial penalty. By the time I finished my due diligence, a period spent visiting and consulting with experts in photo ID and daguerreotype photography and learning as much as I could about AJC and the New York Knickerbockers, I had no reasonable doubt AJC was depicted in the half plate and the other people depicted were fellow Knickerbockers. So at the time I reached my conclusion, I had no economic interest in the half plate or any of the other items or any other conflicting motivation except to learn the truth.

It is not my intention to spend a lot of time discussing Stephen Mancusi's report. That was why I retained Jerry Richards, as respected an expert in photography and photographic facial comparison as anyone in the field. Jerry's report speaks for itself. Suffice it to say that while I respect Mr. Mancusi as a knowledgeable and distinguished forensic artist, as well as a fine gentleman, when it comes to the intricacies of photographic identification, which require a detailed understanding of photographic processes, Mr. Mancusi exhibits a lack of expertise typical of a person opining on a matter that requires

expertise from outside his field. His report does not take into account how different placement of studio lighting in the comparison images could result in the appearance of fictitious differences. His report fails to discuss the extensive use of touch-up in daguerreotype photography (the half plate almost certainly has been touched up and the quarter plate definitely so), which again can result in the appearance of fictitious differences. His report, by focusing on distinguishing characteristics such as scars, nose difference and smile lines between images taken 10 to 15 years apart, gives weight to irrelevant differences. His report makes no mention how emulsion type used in daguerreotype photography, in concert with the placement of background lighting, can cause a person's irises to appear much smaller than they actually are in anything other than the most high resolution images. His report by comparing the left side of the face in one image to the right side in another does not take into account the asymmetrical nature of the human face. And, of most concern, his report shows no recognition that the conclusions one draws when comparing Subject C to Subject A4 are not necessarily the same as the conclusions one can draw when individually comparing Subject C to Subjects A1, A2, A3 or A4 regardless whether one concludes that Subjects A1, A2, A3 and A4 are the same individual.

This last point is crucial and warrants further explanation. When a person poses, no two poses are precisely the same, especially if they are taken in different photo shoots. A person may tilt his head one way one time, another way the other time. He may be in a better mood and therefore exhibit a different smile. The studio lighting could be different. He could have suffered a disfiguring injury. The reasons are endless. If there are no exclusionary differences between the comparison subjects, the conclusion that the subjects likely are different individuals then becomes a subjective determination that relies crucially on how one's brain interprets the comparison of the two subject images. So, say, if I was to regard it as a close call between concluding that the subjects possibly could be the same individual versus concluding they likely are not, there could easily be enough differences in the subject's appearance in another pose to cause my brain to perceive the second comparison just differently enough that I will arrive at the other conclusion. This is accepted doctrine in photo ID, as Mr. Richards states, and is consistent with simple common sense. There are no shortcut methods to doing photo ID. If Mr. Mancusi desires to opine whether Subject C is the same person as Subjects A1, A2 and A3, he must undertake separate comparisons with those other subjects. He failed to do so and therefore his conclusion that Subject C is unlikely to be one of the other A subjects is necessarily suspect due to having been derived through improper analysis.

Particular mention too needs to be made about Mr. Mancusi's observation that the iris size varies between Subjects C and A4. Of all the factors Mr. Mancusi considered, this one more than any other comes across as weighing most heavily in his determination that it is highly unlikely that Subject C is the same person as Subject A4. Mark when discussing this issue mentions that Mr. Richards had access to a higher resolution image of the half plate. At the outset, Mr. Mancusi and Mr. Richards were each given the same set of images to work from. The image of the half plate had been generated by Mark from a transparency I provided him. Mr. Mancusi had been given the images first. Jerry Richards was given his set when he was retained by me, which was after Mr. Mancusi had submitted his report. After Jerry examined the images he told me that the half plate image was of insufficient resolution, and that without a higher resolution image to work from any comparison he did would be severely hindered. Being the experienced photo ID expert that he was, he had long experience in knowing that crucial features often will show up only in an image of a certain resolution. The irises in particular often appear materially smaller in a lower resolution reproduction of a daguerreotype. I therefore contacted distinguished SABR member John Thorn, who in turn contacted Ken Burns. Mr. Burns had a high resolution image in his files of the half plate that he procured while photographing my collection in

preparation for his 1990's Baseball documentary. Mr. Burns' people were kind enough to provide me with the higher resolution image, which Jerry Richards used. Had Mr. Mancusi recognized the critical necessity of using a higher resolution image than Mark provided him and insisted as Mr. Richards did that he be provided with a higher resolution image, he would have been accommodated in the same manner. But, being apparently unfamiliar with the effect studio lighting in conjunction with emulsion type can have on obscuring a significant part of the iris in reproductions of daguerreotypes, he never expressed the need. He thus did not see when he formed his conclusions and wrote his report that the irises are the same approximate size, and when margin of error is factored in are statistically identical. Mark attempts to obscure this critical error in Mr. Mancusi's report by allowing the deletion of the word "much" before the word "smaller" in the third to last paragraph of Mr. Mancusi's report. Thus, instead of reading "As mentioned, Subject C's irises are *much* smaller than those of Subject A and B...", the sentence was altered to read "As mentioned, Subject C's irises are smaller than those of Subject A and B...". This is unfortunate, and was done to imply that Mr. Mancusi formed his conclusions based on a smaller discrepancy in iris size than in fact he observed. I disagree with Mark's contention that a 20% (changed from 18% in the second edition of his report) discrepancy in iris size still exists. The blending of the iris with the sclera makes measurement that precise unrealistic, as well as creates a margin of error greater than 20%. To use Mr. Richards' words, "measuring the iris with any degree of accuracy can be problematic." In regard to Mark's reference to AJC's passport description of black eyes, I regard that to be meaningless. Passports, especially from the 19th century, are notoriously inaccurate in regard to subjects' physical features. How many Anglo Saxon Caucasians have black eyes? Mr. Mancusi too doesn't believe AJC had black iris color, at least to the extent that Subjects A1, A2, A3 and A4 might be AJC. For those four subjects, in Mr. Mancusi's words, the "eye color appears slightly light". So if in fact AJC did have black iris color, as Mark claims, comparison Subjects A1, A2, A3 and A4 should not have been used, thus rendering his report useless. As to Mark's response that even if the passport description of black eyes is incorrect one can still conclude that they had to be sufficiently dark such as to be nonblue, I regard that statement as pure conjecture unsupportable by fact. To the contrary, if one were to examine every image believed to be of AJC, I believe the conclusion would be that his iris color was certainly light enough to be in the blue category.

Response is warranted to Mark's assertion that Mr. Richards, by focusing too much on Mr. Mancusi's analysis of the nose, scar and irises, lacks understanding of the "plain language" of the report. Mr. Mancusi cites a number of facial differences to support his conclusion that it is "highly unlikely almost to the point of exclusionary" that Subject C is the same person as Subject A4. Of the differences he cites, as mentioned, he puts the most focus on the irises. He also puts considerable weight on the scar and the nose. These three differences form a substantial part of the "whole" of Mr. Mancusi's differences. I believe that Mr. Richards, by exposing the error in the irises analysis and the irrelevancy of any differences that could have been caused by casualty, touch-up or photographic illusion (e.g., scaring and nose difference), has so reduced the "whole" of Mr. Mancusi's extensive use of phrases such as "seems to", fairly good", "does not seem like", "in the realm of possibility", "up to the level of likelihood", his conclusions are weak and particularly ambiguous in derivation.

Mark challenges how much impact touch-up, an enhancement technique widely employed by daguerreotype studios, can have. As mentioned, the quarter plate has been touched up and the half plate almost certainly so. Color has been added to the quarter plate, most prominently on the lips. Close examination of the half plate will indicate that (i) the top half of AJC's beard appears lighter compared to the bottom half and (ii) the watch chain has been enhanced, clear indications of touch-up. So what impact can touch-up have? It can materially reduce or even eliminate smile lines. Scars, if they

exist, too can be made to disappear. Irises can be altered. Lips can appear fuller. Even shaving preference can be made to appear different. These are all differences Mr. Mancusi cites, and his failure to recognize the possibility that they are illusions created by touch-up is a significant deficiency in his analysis. Mark in discussing touch-up makes statements that I believe are incorrect. For example, he states that in order for touch-up to be taken into consideration as a legitimate explanation for perceived differences, one must first establish precisely where it has been applied. He also questions its potential impact. These views indicate a lack of understanding that touch-up, if applied adroitly, can be very difficult if not impossible to detect, as well as be very effective in altering features. Accordingly, it is not necessary to specify the precise area(s) of application for the issue to have relevance. What is necessary is that its application be raised as a realistic possibility (which Mr. Richards does). At that point all differences that can be reasonably attributed to it must become suspect.

Both Mr. Mancusi and Mr. Richards state that exclusionary differences do not exist between Subject C and the comparison subjects. On what basis then does Mark opine that Subject C is not AJC? He relies on his particular views of human anatomy, pursuant to which the nose, lips and other facial features appear sufficiently different among the subjects to preclude the possibility that they are from the same individual. By coming to his conclusion through subjective analysis and inference, Mark accepts that photographic facial comparison is art as well as science. I too agree it is.

Mark supports his opinion through an alternative approach. First, he shows us images of some people whose resemblance stays somewhat constant over time, the implication being that because in his opinion Subject C compared to the A subjects does not maintain the same resemblance, they cannot be the same individual. That is faulty reasoning because, as even Mark admits, not all people maintain the same resemblance as they age. Consider the pictures of Cap Anson from 1874 (Illustration 1) compared to how he appeared in 1887 (Illustration 2) (examples I provided in the prior version of my response and which Mark has now incorporated as part of his response) which encompass roughly the same time difference between AJC in the half plate compared to the various comparison A images. Without the background knowledge that these two images depict the same individual, would it be clear at first glance that they do? Mark, even though grudgingly admitting that some people may conclude that the images do not look alike, concludes that they depict the same individual due to strong "external evidence" (e.g., provenance) and "no facial features mismatches" to the extent they can be discerned (translated, no exclusionary differences). Consider now the following. In the late 1980's the image of the c.1868 Marshalltown, Iowa team appeared at auction. (Illustration 3, Anson standing at the far right). This image, never before seen and being Cap Anson's earliest known baseball image, would be on most short lists of important 19th century baseball images. I was an avid collector of 19th century baseball photography at that time and was aware of the auction, as were a number of fellow collectors. Based on various factors the consensus was that the image likely dated to the late 1860's/early 1870's. Yet neither I nor to my knowledge anybody else, including the auction house, which was run by a sophisticated and respected individual, save one person (who compared the image to a woodcut of Anson's 1874 image) had any inkling Anson was depicted in the photograph even though at the time most of us were cognizant the image (i) might be important, (ii) surfaced in the Midwest and (iii) might depict a player appearing in 1880's tobacco or photographic issues. In addition all of us were quite familiar with what Anson looked like in the 1880's and would have had little difficulty matching the image to him if there was any noticeable resemblance. What this event demonstrates is that a person's facial features can change so markedly over a decade or two that a group of sophisticated collectors based on image comparison alone can be unable to make a connection.

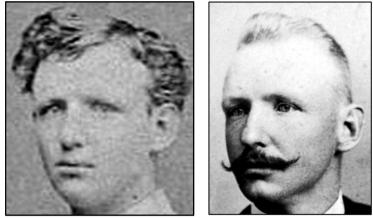


illustration 1

illustration 2

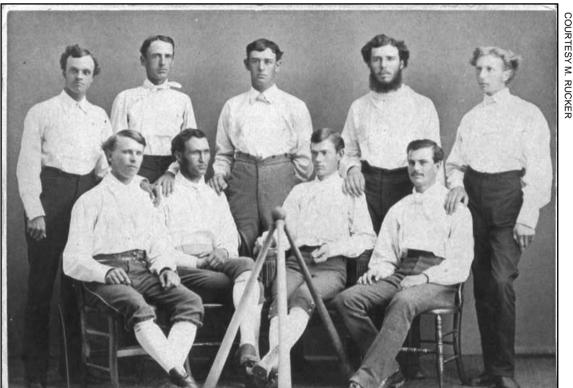


illustration 3

Second, Mark makes the alternative argument that for those subjects whose appearances do change over time, certain facial structures will remain unchanged such that one can conclude to the point of practical certainty that subjects that depict non-exclusionary differences in these facial structures are different individuals. This argument, when applied to comparing Subject C to the A subjects, therefore compels the conclusion they are different people. That is not correct. Ignoring for a moment how many of these differences Mark sees even are real, as opposed to being photographic illusions or touch-up creations, no such conclusion is compelled. These differences are non-exclusionary so their significance and the conclusions one draws from their perceived presence reflect one's personal opinion and are therefore subjective in nature. For example, Mark opines that the nose varies too markedly to be caused by a casualty. I discussed this point at length with Jerry Richards. Jerry could not have been more emphatic in stating that he has seen many instances where nose difference among subjects known

to be the same individual has differed more substantially that what appears in this instance (and this assumes the nose "difference" here is even real and not caused by external circumstances such as studio lighting and different head tilt). The point is that Mark's opinions about the importance of nose difference as well as other perceived differences in facial structure are unique to him. He is entitled to hold them, to be sure, but he needs to recognize that other people can look at the same set of observations and reasonably arrive at the exact opposite conclusion.

In addition, even for those people who as they age maintain a consistent resemblance, does it necessarily follow that there are not extant images of them taken under certain conditions that can mislead one into believing they are of different people? Jerry Richards certainly believes so. In Jerry's words, "It must also be remembered that the face is an extremely dynamic portion of the body containing dozens of muscles that can significantly change its appearance in an instant. Even the raise of an eye brow, reflected in the instant of capture, can make an image comparison problematic."

Mark attempts to rebut this statement by saying that due to the relatively long exposure time of daguerreotypes (by the late 1840's, typically around 5 seconds), all people each time they pose for a daguerreotype will exhibit the precise same facial expression. That does not follow. There are a myriad of facial expressions one can easily hold for the duration of a daguerreotype exposure. A few seconds is a very short period of time, and the exposure time shortened as the process advanced. Thus the exposure times for the A subjects were likely shorter than for Subject C.

To Mark the fact photo ID has revealed no exclusionary differences between Subject C and the comparison subjects is a minor matter that we all may ignore. I remember vividly my encounter with one of the photo ID experts with whom I consulted 20 years ago. When I first showed him the various images, he had doubts that that Subject C was the same individual as Subject A1. He then proceeded to display enlarged images of Subject C and Subject A1 on adjacent monitors in his studio and compared various facial features. After he concluded his analysis he told me he was wrong, that he now felt it was highly likely he was looking at the same individual. I recite this experience not to say that this person has to be correct, but simply to demonstrate that other respected people in photo ID can form the exact opposite conclusion that Mark does. Why then must Mark be right and everyone else with an opposing view wrong? Mark by his own admission does not do photographic facial comparison for a living. This other person did. Mark candidly admits he "certainly can't do all the things that a trained practitioner can do" and that he lacks "the many hours of 'face-time' one gets in a full-time job". Mark's own words about who is not a facial comparison expert bear repeating -- "(t)here are some that think they are good at it but they are clearly not. It's what you don't know that you don't know that gets you in trouble." Mr. Richards, in contrast, earns his living opining and testifying on matters such as this. He states quite firmly that whatever differences might exist between Subject C and the various comparison subjects can easily be explained by the significant time difference between the images, coupled with perceived and illusory differences created by factors as trivial as how one decides to smile at the moment the shutter is clicked. On this last point, don't take my word. Just go to a mirror and experiment in smiling in different ways and observe how that will make your lips appear.

As to Mark's view that a forensic artist such as Mr. Mancusi is the expert best qualified to opine whether AJC is in the half plate, I could not disagree more. Mr. Mancusi is an artist; he is not an expert in photography. What is being undertaken here is photographic comparison, where it is crucial to know if observed discrepancies are real or photographic illusions. Studio lighting, emulsion type, touch-up, lens focal length are all factors that can create the impression of crucial illusory differences. I would think the most qualified person would be an expert in photography such as Mr. Richards who does photographic facial comparison as a living. In saying this I mean no disrespect to Mr. Mancusi. But he has been asked

to render an opinion on a matter that requires expertise outside his field.

Finally, even if it could be proven that Subject C is not the same person as any particular A subject, how do we know that it is not the A subject that is not AJC? A Cartwright family member whom the half plate was passed down to and who had direct memory of AJC identified Subject C as being AJC.

Here are three other images of AJC (illustrations 4, 5, and 6). They were not used in Mancusi's or Richards' reports because of extensive touch-up, hand-coloring, or difference in profile. I notice a definite resemblance when I compare them to Subject C.



illustration 4

HPD subject C





illustration 6

So if the scientific analysis is inconclusive as to whether AJC is in the half plate, why do I feel he is? There are a number of reasons, the most importance being provenance. Bruce Cartwright, Jr., ("BC") AJC's grandson who was ten years old when AJC died and who had direct memory of him, and who almost certainly would not have had a different view on the identification of AJC in a family relic than his grandfather and father, in a 1938 letter identified AJC as being the person in the center back in the half plate by requesting that his bronze be sculpted based on that image. Here is a copy of that letter

(Illustration 7) along with an accompanying letter (Illustration 8) from the Chamber of Commerce of Honolulu. Mark makes reference to BC's letter. He explains it with a dual approach. First, he tells us that because BC was incorrect as to certain matters of baseball history (e.g., confusing 42 paces with 90 feet) or embellished AJC's accomplishments, he is unqualified to identify his grandfather in an old family heirloom photograph passed down to him. My grandfather was subcontractor in steel fabrication. I am certain there were times when explaining what he did that I mistook an I-beam for a T-beam, or exaggerated his business accomplishments. So by Mark's line of reasoning, I cannot credibly identify my grandfather in a family heirloom photograph passed down to me.

Alexander Cleland Archives

BRUCE CARTWRIGHT Honolulu, Hawaii

October 18, 1938

Mr. John Hamilton, Secretary Chamber of Commerce of Honolulu Honolulu, Hawaii

Dear Mr. Hamiltons

I enclose herewith a portrait of Alexander Joy Cartwright, Jr., "The Father of Organized Baseball". This is an enlarged photograph made from a deguerreotype in my possession that was taken in New York City at the time that he formed the "Knickerbocker Base Ball Club."

I hope that it can be used by the sculptor in making the bronze plaque for the Base Ball Hall of Fame. In case the sculptor desires to leave off the hat it might help him to know that grandfather had thick straight black hair that he parted on the left side.

I would like to know if we could buy a duplicate of this bronze plaque to place in "Cartwright Park" in Honolulu during the Baseball celebration in 1939, and what such a plaque would cost.

I regret exceedingly that Mrs. Cartwright and I will be unable to attend the celebration at Cooperstown, N.Y. maxt year. However, if they want one of the Cartwrights there, my son, William E. Cartwright, might be able to go with his wife if the Base Ball Centennial Committee will pay their travelling expenses there and back.

Thanking you for your interest in this matter, I remain,

Sincerely,

(signed) Bruce Cartwright

illustration 7

R. HEREBYAND

Alexander Cleland Archives

CHAMBER OF COMMERCE OF HONOLULU



HONOLULU, HAWAII, U.S.A.

October 20, 1988

Mr. Alexander Cleland, Secretary Baseball Museum and Centennial 149 Broadway New York City, N.Y.

Dear Mr. Cleland:

At the request of Mr. William E. Srandt, Manager of the Service Bureau, of the Mational League of Professional Baseball Clubs, Mr. Bruce Cartwright, grandson of Alexander Joy Cartwright, Jr., "The Father of Organized Baseball", is sending a photograph to be used by a sculptor in making a bronze plaque to be placed in the Baseball Hall of Fame. Mr. Bruce Cartwright has stated that he would like to purchase a duplicate of the bronze plaque for use in Cartwright Fark in Bonclulu, to be presented scuetime during the Baseball Contennial in 1939.

A copy of Mr. Brace Cartwright's recent letter, also a copy of our letter to Mr. William E. Brandt are attached.

It is hoped that some representation from the Cartwright family may be present at the time when the Cartwright plaque is placed in the Easeball Hall of Fame, proposedly during the Centennial next year. If such a plan can be arranged through the Centennial organization it certainly would be appreciated by the Cartwright family. We, of course, are not in a position to make any suggestions, but would be gled to hear from you in response to this inquiry as to whether or not the Centennial organization would consider it in order and feasible to invite one or two members of the family to be present on such an occasion.

With appreciation of your cooperation, we are,

Yours very truly,

OP/DOWNERCE OF HOSOLULU e Al Hamilton, Manager John

JMI/P

поса носнава "Селіненсе" анала Балана от Сониски United States от Андиса.

illustration 8

As an aside, I cannot help but mention the irony of Mark's reference to passages in John Thorn's book "Baseball in the Garden of Eden" to support the notion that BC's identification is to be discredited, given John's long-held view that the AJC half plate identification is correct. John has provided for this newsletter supplement the following statement: "I continue to be of the opinion I have had for decades, that the man depicted in the back row, center of the half-plate daguerreotype, depicting six members of the Knickerbocker Base Ball Club in 1845-46, is Alexander Cartwright. The combination of verisimilitude and provenance is for me determinative."

Mark also says that "provenance cannot make an item into something it is not." I do not take issue with that statement. But where has it been established that Subject C cannot be AJC? No exclusionary differences have been established. As to Mark's comment that one should not have to use "tortured rationale" to identify an image, the same can be said to rejecting a previously accepted identification. The Cartwright family was by all accounts obsessed with memorializing AJC's place in baseball history. For his bronze they had a number of images to select from. In order to reject the AJC half plate identification, one must conclude that for this bronze the family selected the one image that is not AJC. How tortured a rationale is that?

As to Mark's reference of the absence in AJC 1860's letter to Charles DeBost of mention of the half plate, how is that relevant? The letter refers to a pending lithographic composite of the Knickerbockers. Composites are composed of individual portraits. If one is interested in providing an image of oneself for such a work, the logical choice would be the individual portrait the letter describes. In addition, I would think that if a person in the 1860's is contemplating sending across the seas from Hawaii to New York a photograph, he would reasonably wonder whether he will ever see that photograph again. Accordingly, the most logical choice to send would be a replaceable image, which the half plate certainly was not. Also, even if one were to conclude AJC did not have the half plate in his possession when he wrote the letter, the confirmed existence of correspondence between himself and former Knickerbockers supports the notion that the image could have subsequently been sent to him. What is relevant is that at some point he took possession of it and that his family has consistently maintained it depicts him with fellow Knickerbockers.

In addition to the rock solid provenance, there are other considerations, none of which in and of itself is dispositive, but which taken as a whole are suggestive of AJC being in the half plate.

1. The half plate is almost certainly a Knickerbockers team image. Two Knickerbockers, Duncan Curry (bottom row, left) and Doc Adams (bottom row, center) have been identified therein (see, for example, "Baseball in the Garden of Eden"). Illustration 9, an 1862 Knickerbockers reunion image, shows comparison images of Curry and Adams. Curry is standing at the far left (see Illustration 10 for a close up) and Adams is seated second from the left (see Illustration 11 for a close up). Illustration 12 is another image of Curry, which depicts him in his later years. As to the hats depicted in the half plate, three are conclusively straw. Two most likely are cloth and for the remaining hat it is inconclusive what the material is. The Knickerbockers uniform, which included straw hats, was officially adopted in 1849 after AJC left for California. Finally, the haughtiness of the pose in conjunction with the seeming congeniality amongst the subject individuals is consistent with the image being a depiction of fellow members of an aristocratic social organization such as the Knickerbockers.



illustration 9



illustration 10



HPD subject H



illustration 12



illustration 11

HPD subject G

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- 2. The half plate, by its plain brass mat, is consistent with daguerreotypes taken in the mid to late 1840's, before AJC left for California. Thus the dag dates to the period AJC was known to be in New York.
- 3. The height and build of the person identified as AJC is consistent with a person described as being 6'2" and 210 lbs.
- 4. If AJC is not the person in the back row center, then likely a comparison of that person with other believed to be of him would reveal exclusionary differences. For example, Mark makes reference to Abe Lincoln. Well some ten years or so ago there was a well-publicized case of a previously unknown Lincoln dag surfacing, an identification which if confirmed would make that dag possibly the earliest known image of Lincoln thus potentially giving it a 7-figure value. Jerry Richards was one of the experts hired to evaluate this claim. Jerry tells me that his analysis was conclusive in establishing that the person in the dag could not be Lincoln, which is exactly what one would expect if images of two people taken at random save for some resemblance in facial appearance are scientifically compared.
- 5. AJC in the half plate has a fuller face than in the A comparison subjects, which is consistent with his documented medical history of becoming gravely ill after he set sail from California. Therefore the thinner faces in the A comparison images is hardly unexpected.

I conclude with the following. Due to the confirmed absence of exclusionary differences between Subject C and any of the comparison subjects, there is no proof AJC has been misidentified in the half plate. All that has been proffered are subjective opinions, which run the gamut from saying Subject C highly likely is the same person as in the comparison subjects to saying it highly likely is not. And in a regard to those opinions that Subject C highly likely is not the same individual, one comes from a person who is not a paid professional in photo ID, a person who by his own admission lacks the qualifications and experience of a full-time professional. The other comes from a person lacking expertise in critical aspects of photography and who has submitted a report fundamentally flawed in a number of significant ways. In regard to making a positive identification of AJC in the half plate, photo ID is inconclusive, as the great majority of cases are when comparing two subject individuals known through external means to be the same individual. The dispositive provenance of the half plate accompanied by ancillary supporting information then become the determining reasons to positively identify AJC therein. Not only is there is no reasonable basis to alter the AJC identification in the half plate, the confirmed absence of exclusionary differences reinforces the identification.

I would like to thank Barry Sloate and John Thorn for the helpful suggestions they made, as well as Kens Burns and his staff for their providing the high resolution image of the half plate. I would like to thank Mark Fimoff for his commitment to open debate and willingness to present both sides of the issue, and Stephen Mancusi for the courteous and patient responses to my questions. Bill Hickman deserves special praise for his patience and tremendous assistance in getting the respective views published. I would like to give special thanks to James Martin of Orion Analytical for introducing me to Jerry Richards. Most important I would like to thank Jerry Richards for the interest he took in this project, and for the education he gave me in photographic facial comparison.