Robert Taft photography research notes

Section 61, Pages 1801 - 1830

These research notes document the research Robert Taft undertook in writing his works on the history of American photography. This series complements the series of Taft's photography correspondence included on Kansas Memory as unit 221204.

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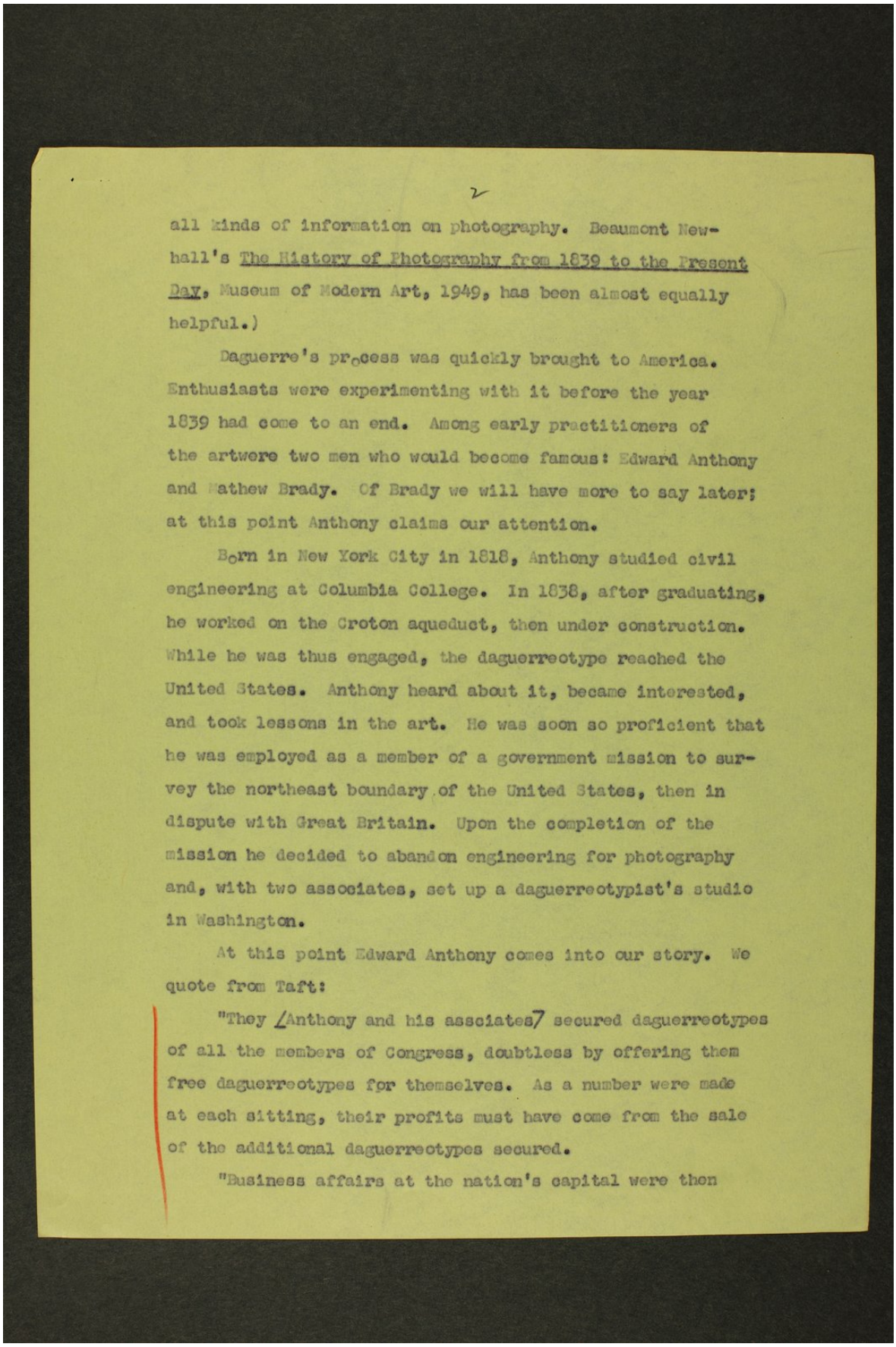

all kinds of information on photography. Beaumont Newhall's The History of Photography from 1839 to the Present Day, Museum of Modern Art, 1949, has been almost equally helpful.)

Daguerre's process was quickly brought to America. Enthusiasts were experimenting with it before the year 1839 had come to an end. Among early practitioners of the artwere two men who would become famous: Edward Anthony and Mathew Brady. Of Brady we will have more to say later; at this point Anthony claims our attention.

Born in New York City in 1818, Anthony studied civil engineering at Columbia College. In 1838, after graduating, he worked on the Croton aqueduct, then under construction. While he was thus engaged, the daguerreotype reached the United States. Anthony heard about it, became interested, and took lessons in the art. He was soon so proficient that he was employed as a member of a government mission to survey the northeast boundary of the United States, then in dispute with Great Britain. Upon the completion of the mission he decided to abandon engineering for photography and, with two associates, set up a daguerreotypist's studio in Washington.

At this point Edward Anthony comes into our story. We quote from Taft:

"They [Anthony and his associates] secured daguerreotypes of all the members of Congress, doubtless by offering them free daguerreotypes for themselves. As a number were made at each sitting, their profits must have come from the sale of the additional daguerreotypes secured.

"Business affairs at the nation's capital were then

conducted in a free and easy manner, for Thomas H. Benton, the chairman of the Senate committee on military affairs, offered Anthony and his partner the use of the committee room for the practice of their profession.

"John Quincy Adams was photographed by this firm, for he records in his diary under date of April 12, 1844, 'At the request of J. M. Edwards and Anthony, I sat also in their rooms while they took three larger daguerreotype likenesses of me than they had taken before. While I was there President Tyler and his son John came in; but I did not notice them.'

"Regardless of Mr. Adams' feeling for President Tyler, it is apparent that with ex-presidents and presidents as sitters, Edwards and Anthony were doing a very good business, and they succeeded in recording on the silver plate all the notables of Washington. The likenesses which they secured here formed a National Daguerrean Gallery, which was for many years on exhibition in New York City. This collection, which at the present day would be nearly priceless, recording as it did the images of many figures famous in American history during the first four decades of the last century, was unfortunately, save for a single piece, destroyed by fire in 1852. The single exception was the portrait of none other than John Quincy Adams! The spirit of the grim old warrior (who had passed to his reward by this time) must have been comforted at the ability of his image to withstand this trial by fire, while the metallic immortality of Tyler and his contemporaries proved to be no immortality at all."

Now, we have a hunch that at least some of the daguerreo-

types in our exhibition were made by Anthony while he was creating his National Daguerrean Gallery. They would, of course, have to be those given to his subjects or sold to admirers rather than those exhibited in New York, but it is not inconceivable that many of these survived. Our collection includes many men who were prominent in Washington between 1843, when Anthony established his studio there, and 1852, when fire destroyed the Gallery. We have, for example, Thomas Hart Benton, United States Senator from Missouri and Anthony's patron; Lewis Cass, during these years Senator from Michigan and (in 1848) Democratic candidate for the Presidency; Martin Van Buren, a political power for years after he left the Presidency in 1841; John Tyler, who succeeded to the Presidency after the death pf William Henry Harrison; Millard Fillmore, who became President when Zachary Taylor died in 1850; and Franklin Pierce, who followed Fillmore. Louis Kossuth, Hungarian patriot, was in the United States in 1851-52; Narciso Lopez, Spanish-American revolutionary, was here most of the time from 1848 until 1851, when he was captured and executed after the failure of a filibustering expedition to Cuba. Likenesses of both men are among our daguerreotypes.

Some of the daguerreotypes were have mentioned were certainly made before 1852; all could have been. That, and the prominence of the subjects, leads us to think that they were Anthony's work. If this surmise is correct, the destruction of the National Daguerrean Gallery was not as calamitous as Taft thought, for something approaching it is to be found in the Chicago Historical Historical Society.

But assume that we're wrong, and that someone other

than Anthony, perhaps several others, made the daguerreotypes that we have so proudly described. The fact remains that our collection includes the images of many figures famous in American history during the first two-thirds of the nineteenth century. We lack space for a complete list, but we can specify, as typical, the following: Salmon P. Chase, Governor of Ohio, United States Senator, Secretary of the Treasury, and Chief Justice of the United States; John A. Logan, Congressman, Senator, and Civil War General; John J. Crittenden, Senator from Kentucky and successor to Clay's reputation as a great compromiser; Thomas Buchanan Read, painter and poet ("Sheridan's Ride"); John McLean, Congressman from Ohio, Postmaster General, and Associate Justice of the United States Supreme Court; John C. Fremont, explorer, first presidential candidate of the Republican party, and Civil War General; Joseph Henry, first director of the Smithsonian Institution; Thomas Sully, portrait painter; William H. Seward, Governor of New York, Senator, and Secretary of State in Lincoln's cabinet; and James Shields, who once challenged Lincoln to a duel, and achieved fame of another kind by becoming the only man ever to represent three states in the United States Senate. In almost every instance, the subjects look younger than they appear to be in the photographic portraits by which they are generally known. We believe, therefore, that most of these daguerrean likenesses have never been published.

So far we have mentioned only daguerreotypes of national figures. In our exhibit we have not neglected those of local interest. But here, too, we must limit ourselves to a few typical subjects instead of presenting a complete list.

We have, for example, a much younger John Wentworth than we have seen in any other picture; we have John B. Drake as he appeared in the early 1850's; Mrs. Stiles Burton and her two children, Le Grand and Virginia, who was to become Mrs. Ira Holmes and the mother of Burton Holmes; John B. Farwell and Mrs. John B. Farwell; Gilbert Hubbard, for whom Hubbard Woods was named; William Harvey Wells, superintendent of schools, 1856-64; and, in interesting contrast, an Indian youngster named Little Smoke, a grandson of old Chief Shabbona, to whom many early settlers of northern Illinois owed their lives.

Fine daguerreotypes of prominent people are rare; fine daguerreotypes of places are very rare. In our exhibit we include four of the latter: one of the Cook County Court House in the 1850's, and three of Galena taken during the same period. The one of the Court House is not in good condition, but interesting nevertheless; the three Galena views are superb. Each shows river steamers in the foreground, and in the background, the straggling town on its precipitous hills. Together, the Galena pictures convey a far more vivid impression of the old lead mine metropolis than all the verbal descriptions and prettied-up prints that we have ever seen.

A passage from Taft is a fitting conclusion to our dissertation on daguerreotypes:

"A well made daguerreotype is a thing of real beauty, and in some respects is not surpassed by the products of any modern process, for a good daguerreotype possesses brilliance and shows detail far better than any paper print.

There are, nevertheless, some outstanding defects which should be noted. Because of the mirror-like surface, the image can be seen only when held in a certain position. If held at most angles it ~~mam~~ simply reflects light over its entire surface into the eyes of the observer....Furthermore, only one copy of the image could be obtained from each exposure of the camera. That is, the method did not permit of making duplicate copies from a master negative as does our modern process. Finally, the daguerreotype image is reversed from right to left."

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For the museum visitor, we have done our best to remedy two of the disadvantages which Taft mentions. We have copied photographically the most important daguerreotypes we are showing. If, therefore, the visitor is bothered by reflected light, he can look at the photographic copy. And in making that copy we have reversed the image so that it appears as the subject would have appeared to the eye. We might add that many knowledgeable visitors have already praised the excellence of these photographic copies--a compliment which our staff photographer richly deserves.

The daguerreotype reached the apex of its popularity in the early 1850's, and then gave way to the ambrotype. This is really a wet-plate glass negative which can be viewed as a positive simply by placing it against a piece of dark material or by painting the back black. In an ambrotype, highlights are represented by the grayish-white tone of the developed emulsion; the shadows, being transparent in the glass, become black. (Understand? We don't.) Like the daguerreotype, each ambrotype is unique. The glass plate

exposed in the camera is itself the final product.

Though inferior in quality to the daguerreotype, the ambrotype enjoyed a great vogue between 1855 and 1865. We show many interesting specimens. Some of the best are portraits of people whom we have not been able to identify; other subjects are well known. In the latter class are Mrs. Sarah Fisk Douglas, mother of Stephen A. Douglas; Mark Beaubien, proprietor of the Sauganash, Chicago's first hotel; Mrs. John A. Logan; Mrs. John B. Drake and her niece; Capt. William P. Black, Company K, 37th Illinois Volunteers, a romantic figure of a soldier if we ever saw one; and Col. John C. Black of the same regiment.

The ambrotype section includes a number of fine Chicago views. Several show steamers of the A. E. Goodrich Line, all taken during the early 1860's. One ambrotype, made in 1858, pictures the two huge grain elevators that then stood at the mouth of the Chicago River; another, of about the same date, takes in the corner of Lake and Canal streets with the near North Side in the background. We are especially happy to have an excellent view of the residence of William H. Brown (on the site of the Peoples Gas Building) since Mr. Brown was the first president of the Chicago Historical Society.

Popular as they were, ambrotypes never had the photographic field to themselves, for photographs printed on paper from glass negatives, ~~xxx~~ which had the incomparable advantage of being capable of endless duplication, competed with them from the beginning. But before we tackle that subject, a few words about daguerreotype and ambrotype cases are in order. In the beginning, cases were made of paper

pressed into a mold, and then painted and varnished to imitate leather. However, in 1854, one Samuel Peck of New Haven, Connecticut, patented a composition case, and thus won the honor of inventing the first plastic product to be made in the United States. His patent reads: "The boxes are made of a composition of shellac and sawdust or fibrous material with a suitable coloring matter, passed between hot rollers and when plastic, pressed into molds."

Some cases were small and round with a diameter no greater than two inches; others were rectangular with dimensions as large as seven by nine inches. Most had a hook-and-eye clasp and were lined with velvet, usually, but not always, dark red.

Proliferation of design raised daguerreotype cases to the status of a minor art. On this subject we can do no better than to quote Katharine Morrison McClinton, A Handbook of Popular Antiques (Random House, 1946):

"Designs for composition daguerreotype cases include scenes from American history, sentimental compositions, mythological, religious, political, fraternal and patriotic scenes and designs. Various trades are represented and scenes from the popular fiction of the day, landscape, flowers, shells, and conventional designs. Most scenes and designs are surrounded by borders of rococo scrolls, flowers, leaves and arabesques. All are in high, characteristic baroque relief. The designs are taken from pattern books of the era and are the same as those found on book covers, furniture carvings and various articles of bric-a-brac. Subject matter was seldom original with the die makers, but was taken from dmm drawings, engravings, and

paintings, which were popular during mid-Victorian days. Many of the designs were also used on plastic album covers, collar boxes, and for plastic clock fronts."

And now to paper photography, which is essentially the same today as it was a hundred years ago, except that negatives are made on a film of cellulose nitrate or cellulose acetate instead of on glass. The process was known in this country as early as 1849, but it was not widely used until the latter part of the next decade. Even for this period, examples are rare. Taft remarks: "It is unfortunate that there are not more paper photographs of this period available. Without doubt, many exist, but they are difficult to locate, and, in the absence of positive information, are difficult to classify."

That comment makes us all the prouder of two superb examples that we have in our exhibition. One, taken in 1858, is a panoramic view of Chicago's lake front from 12th Street on the south to the Chicago River on the north. The Michigan Central and Illinois Central stations and yards occupy a considerable part of the foreground, but many landmarks of the day are readily visible: Terrace Row (on Michigan Avenue between Van Buren and Congress streets), the Second Presbyterian Church at Wabash and Washington, the court house, the Rush Street bridge, and the Lake House Rush Street between Hubbard and Kinzie). In five sections, which fit together perfectly, the panorame is more than five feet long. The picture shows some signs of wear, but it is probably the only print that has survived, and weprize it accordingly.

Our second example of early paper photography consists

of a series of eleven photographs taken from the dome of the court house in 1858. The photographer moved his camera around the compass so that his pictures, taken together, show the entire business district and a considerable part of the residential district beyond the stores and office buildings. Here is the real Chicago--five-story buildings cheek to cheek with wooden shacks, unpaved streets, vacant lots piled high with refuse, trees and mansions along the lake front--unkempt, ugly and beautiful at the same time, and vibrantly alive.

Both examples--the panoramic view and the series of views--are the work of Alexander Hesler, Chicago's foremost early photographer. Hesler, a Canadian by birth, started life as a clerk in a hardware store at Racine, Wisconsin. In 1847, when he was twenty-four years old, he came interested in daguerreotypes, learned the art of taking them, and established a studio at Madison. From there he moved to Galena, where he remained until 1853, when he decided to link his future with that of Chicago.

Hesler was a photographer of great ability, and deserves to be remembered if for no other reason than that he produced some of the finest portraits of Lincoln that we have. But it was his misfortune, and the misfortune of all other early American photographers, to be overshadowed in popular reputation by Mathew Brady. (He spelled his first name with one t, an idiosyncrasywhich a good many writers persist in ignoring).

As a photographer, Brady got off to a flying start, for he became interested in Daguerre's invention while he was still in his teens. At the age of twenty he set up a

studio in New York City, quickly attracted attention, enjoyed a large patronage, and won honor after honor. In 1855 he discarded the daguerreotype for the photograph. On his proficiency with this medium his fame was to rest.

Today, Brady is almost universally known for his photographs of the Civil War. Yet his amazing skill in portraiture offers an equally solid base for his reputation. Here is Taft's appraisal:

"By 1845, Brady had conceived the idea for which he deserves rank equal to the greatest historian of the American scene. This idea was the project of collecting all the portraits of the distinguished and notable individuals he could induce to sit before his camera. How well he succeeded is apparent from the fact that in an amazing number of instances, biographies of Americans achieving distinction in the period 1845-1880 contain portraits obtained by him. The phrase 'Photograph by Brady' is a better known by-line in the illustrated journals of the early part of this period than are those of all his competitors combined.... To illustrate the breadth of his photographic career: He recorded by his camera every president of the United States from John Quincy Adams, the sixth president, down to an including William McKinley, with but a single exception... William Henry Harrison, who died in office in 1841, only one month after he was elected....

"The present generation has called Brady 'the Civil War photographer'; and, while this phase of his career was exceedingly important, I am inclined to think his collection of portraits of still greater value. Although many have been destroyed, a very considerable number of his negatives

still survive...."

We have no Brady negatives, but our exhibition includes nine large portraits--the so-called "imperial" size--which he certainly took and five that we believe he took. In this group are Civil War generals (Custer, Garfield, T. W. Sherman, Burnside, Pleasanton), political leaders (Lincoln, Jefferson Davis, John C. Breckinridge, Simon Cameron), an inventor (Cyrus W. Field of Atlantic cable fame), and two women (Mrs. U. S. Grant and Mrs. John Slidell). But among the portraits on exhibit whose makers we have not been able to identify are several that are fully the equal of those by Brady. Not even the master could have caught better likenesses of George Bancroft, historian and diplomat; General William Tecumseh Sherman; General George B. McClellan; and Hannibal Hamlin, Vice President in Lincoln's first administration. Nor could Brady have bettered a photograph of U. S. Grant by Jeremiah Gurney of New York City.

When the Civil War broke out Brady decided to devote all his resources to the making of a photographic record of the conflict. He succeeded in interesting Lincoln and others, notably Allan Pinkerton, then head of the secret service, and received permission for himself and his assistants to accompany the armies. The result was an invaluable collection of at least 3,500 photographs. While all were taken by Brady, many were taken by his assistants. Moreover, there were other Civil War photographers whose work at least equalled Brady's in quality. Alexander Gardner's Sketch Book of the War, a collection of 100 photographs--we have it, but it is not on exhibition--ranks high, and in our opinion the photographs of G. N. Barnard, official photog-

rapher with Sherman's army on the march to the sea and northward, excel those that bear Brady's name. Barnard, therefore, is well represented in our exhibit.

When one considers the handicaps under which the Civil War photographers worked, there results are amazing. Taft has a well-deserved tribute:

"The life of field photographers who attempted to keep up with armies on the march, and to photograph the scenes of conflict, was as exciting and as full of interest as that of their brother historians, the war correspondents. But the life of the photographer was far more distracting. The war correspondent had only his notebook and his pencil to look after, but the photographer had to carry his dark room and all his supplies--glass, collodion, silver nitrate, developer--with him, for the wet process was the only one yet available to the commercial photographer. His plate had to be flowed with collodion, sensitized in his dark tent, hurried to the camera, exposed from ten to thirty seconds, hurried back to the dark tent for development, and a new plate prepared....The operators worked in pairs, one in the dark tent--the other manipulating the camera. What a pleasant life it must have been--especially for the man in the dark tent when shot and shell were flying!"

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But great as their achievements were, the picture-takers could not accomplish the impossible. We quote Taft again:

"With the slow speed of the photographic materials available to these men, action pictures were virtually out of the question. A record of a bursting shell was regarded

as a photographic marvel and was rarely obtained. As a result, the actual conflicts were not photographed, save at some distance, so that the individual figures are scarcely discernible. Occasionally a photograph of a battery firing on command will be found, as the pause between commands made such records possible. The battle scenes, of necessity, were restricted to the events after the actual conflict, when the leaden slugs had found their mark and rendered their subjects sufficiently still for even the slow wet plate to record their images."

We add that nothing did more to bring home to millions the horrible reality of war than these photographs of ~~the~~ unburied dead on fields of battle.

The Civil War not only gave Brady and others an incomparable opportunity to demonstrate the possibilities of a new art; it also brought that art, in two lowly manifestations, to the general public. ~~The~~ We refer to the ~~same~~ carte de visite photograph and the tintype.

The carte de visite, or visiting card photograph, is said to owe its origin to the Duke of Parma, who, in 1857, ordered his photographer to make photographs the size of calling cards. The court photographer of Napoleon III emulated the ducal example, and the fad soon spread to London and the United States. Card photographs could be duplicated endlessly and they were cheap. What better keepsake could the soldier, officer or private, leave with his family and friends when he signed up for service? And what could be more welcome to homesick boys in camps than these small but often good likenesses of sisters and sweethearts at home?

But once the boy was in camp, he was far more likely to have his likeness recorded on a tintype than by means of a carte de visite. (Technically, the tintype is a modification of the ambrotype--a photograph made on black japanned iron.) Taft explains why:

"The tintype was the favorite of the camp following photographer. His stock was more durable, he did not have to bother with the making of prints, and further, only one picture could be obtained for each sitting. If his patron wanted two tintypes he had to pose twice, and therefore paid for two pictures rather than one negative. On the other hand, the boy in camp found that these tintypes would stand the vicissitudes of the army mail service far better than card photographs or ambrotypes."

On this subject Taft quotes a correspondent of the New York Tribune, writing from Burnside's army at Fredericksburg in the summer of 1862:

"Decidedly, one of the institutions of our army is the travelingpportrait gallery. A camp is hardly pitched before one of the monipresent artists in collodion and amber-bead varnish drives up his two-horse wagon, pitches his canvas-gallery and unpacks his chemicals. Our army is now so large that quite a company of these gentlemen have gathered about us. The amount of business they find is remarkable. Their tents are thronged from morning to night, and while the day lasteth, their golden harvest runs on....In one day they took in one of the galleries, so I am told, 160 odd pictures at $1.00 (on which the net profit was probably ninety-five cents each)."

In addition to a sampling of carte de visite photographs

and tintypes we show a number of stereographs, which deserve more space than we were able to allot to them. For the stereoscopic camera was the nineteenth century forerunner of the present-day stereo camera. The stereoscopic camera had two lenses and took two slightly different pictures simultaneously. When viewed through a stereoscope, the two pictures appeared as one with a third dimension. Apparently, Alexander Hesler introduced the process to Chicago. Taft quotes a newspaper report on the seventh annual fair of the Chicago Mechanics Institute, held in the fall of 1854:

"Mr. Hesler exhibits a new branch of his art--the Stereoscope. Two pictures are taken, each the exact counterpart of the other, which are placed in a case and viewed through lenses, which accompany it. By this method, one picture is seen by one eye and the second by the other, yet the two blend in the vision and form a more perfect image than can be formed in other known methods. It seems to stand out from the plate and possess the fulness of reality. All who visit the Fair should examine the Stereoscope."

The stereograph became enormously popular in the late fifties. During the war, the carte de visite outstripped the stereograph it, but with peace it regained the ground it had lost and more. Nor has its appeal ever really waned. As Taft remarks:

"The American stereograph...has the longest history of any form of photograph. The introduction of new and popular varieties of other photographs would temporarily cause a decrease in the sales of the stereograph, but as soon as the new fad passed, the ubiquitous stereograph resumed the even tenor of its way as the leader in the trade....It would

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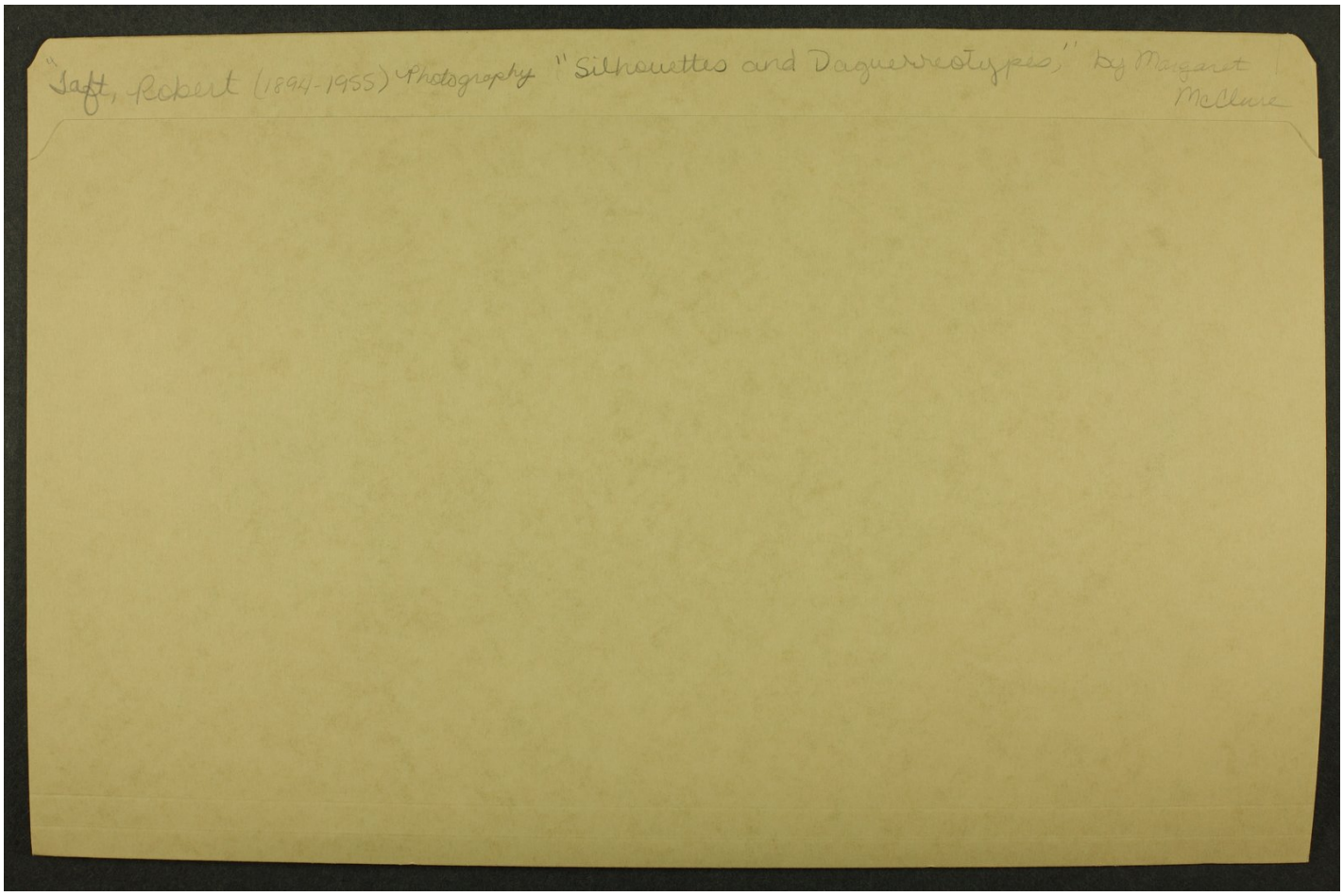
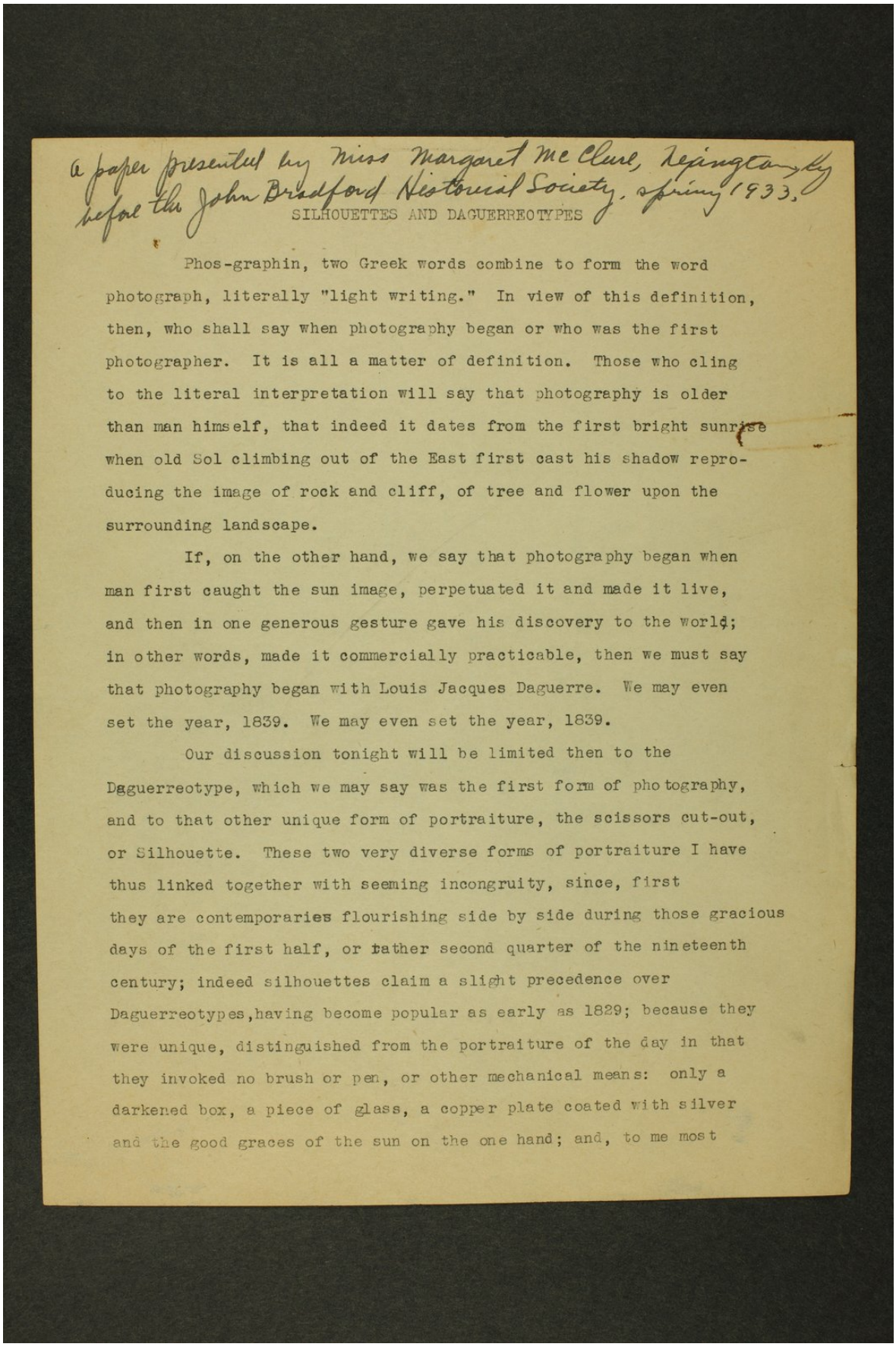
be totally impossible to trace the influence of these stereographs in millions of American homes, and over a period of eighty years!"

That was written in 1942. Since then the stereo camera has swept the country. What could be said of the three-dimensional photograph today!

This is one of the longest articles ever to appear in Chicago History, yet it deals with only a part of what may be seen in "American Photography, 1845-1865." And "American Photography, 1845-1865," presents only a fraction of the Society's collection of photographs. Someday, God willing, we'll publish a catalog of that collection, and demonstrate to an excusably skeptical audience that in what we have written here we have indulged in understatement rather than in braggadocio.

Robert Taft photography research notes





a paper presented by Miss Margaret McClure, Lexington, Ky before the John Bradford Historical Society, spring 1933.

SILHOUETTES AND DAGUERREOTYPES

Phos-graphin, two Greek words combine to form the word photograph, literally "light writing." In view of this definition, then, who shall say when photography began or who was the first photographer. It is all a matter of definition. Those who cling to the literal interpretation will say that photography is older than man himself, that indeed it dates from the first bright sunrise when old Sol climbing out of the East first cast his shadow reproducing the image of rock and cliff, of tree and flower upon the surrounding landscape.

If, on the other hand, we say that photography began when man first caught the sun image, perpetuated it and made it live, and then in one generous gesture gave his discovery to the world; in other words, made it commercially practicable, then we must say that photography began with Louis Jacques Daguerre. We may even set the year, 1839. We may even set the year, 1839.

Our discussion tonight will be limited then to the Daguerreotype, which we may say was the first form of photography, and to that other unique form of portraiture, the scissors cut-out, or Silhouette. These two very diverse forms of portraiture I have thus linked together with seeming incongruity, since, first they are contemporaries flourishing side by side during those gracious days of the first half, or rather second quarter of the nineteenth century; indeed silhouettes claim a slight precedence over Daguerreotypes, having become popular as early as 1829; because they were unique, distinguished from the portraiture of the day in that they invoked no brush or pen, or other mechanical means: only a darkened box, a piece of glass, a copper plate coated with silver and the good graces of the sun on the one hand; and, to me most

remarkable of all, only a pair of scissors, perhaps a lady's embroidery scissors,on the other. In other words they were crafts, not arts; and although many gifted men brought rare artistic instinct to their work in both fields, a proficiency with the pen of brush was not required of them, only a certain skill on the one hand, and an uncanny precision on the other. For this reason both were comparably cheap formssof portraiture accessible to almost any pocketbook and were in their day amazingly popular. Finally both the Daguerreotype and the Silhouette were slain by the same set of circumstances, namely, the discovery of the collodion process of photography in 1847, and the gradual succession of paper pictures made from collodion negatives. This, of course, is our negative and print type of photography today. Silhouettes and Daguerreotypes were both dead and gone before the Civil War. Silhouettists and Daguerreotypists had all turned to other fields for a livelihood.

Although Daguerre is known as the discoverer of the photographic process which bears his name, his success was really the culmination of years of effort by many brilliant men, or if we take into consideration the invention of the camera obscura itself, centuries of brilliant men.

In the mines of Freiburg is occasionally found a vitreous, dull-shining silver ore, which, on account of its appearance, is called horn silver. This compound may be artificially produced in several ways--by passing chlorine gas over metallic silver, by adding a solution of nitrate of silver to a solution of common salt. And silver, when placed in nitric acid will dissolve with effervescence, and the if the solution is evaporated, a solid mass of crystals is obtained, not silver, but the compound nitrate of silver.

It has another property which gives it a place in this discussion. Paper when saturated with this material will become blackened when

exposed to sunlight. From the discovery of the blackening of paper saturated with silver nitrate to the invention of photography is but a step. But many years elapsed before this step was taken.

In 1802 the Englishman, Wedgwood, and his collaborator, the celebrated chemist, Davy, began to experiment in the reproduction of flat objects, such as leaves of plants, upon paper prepared with nitrate of silver. Light was kept from the parts of the paper by covering with the object to be photographed. The paper surrounding the object became dark, that covered by the object remained white, and thus was produced a white outline, or the so-called "white silhouette". Wedgwood in this manner produced copies of drawings on glass. These impressions, however, were not durable. They could not be exhibited in the light for long without gradually fading out like the images on our present-day photographer's proof. The image had been "caught" but the art of "fixing" was as yet unknown.

Nevertheless the first step towards the discovery of photography was taken; and the idea of producing pictures of objects by the action of the sun without aid of a draughtsman became popular and spread throughout the world, gaining many disciples everywhere.

Then Wedgwood conceived an even more ambitious idea; it was the possibility of producing pictures on any bodies whatsoever by the action of light upon sensitized paper. In the attainment of this object he made use of that interesting little instrument the "camera obscura," an invention of the sixteenth century, which had the property of forming flat images of solid objects. He fastened a piece of paper saturated with a silver salt upon the place of the image in the camera obscura and left it there for several hours--unfortunately without result. Something had gone wrong. The image was not bright enough to make a visible impression on the sensitized paper.

Undaunted by the failure of his colleague, the Frenchman, Nicophore Niepce took up the search. In place of the silver nitrate he made use of a most interesting and peculiar substance. It was asphalt or bitumen of Judeae. This black mineral pitch, which is found near the Dead Sea, the Caspian, and in many other places is soluble in ethereal oils, such as oil of turpentine, oil of lavender, oil of petroleum, ether, etc. The action of light renders it insoluble to these liquids. The principle is simple; one had only to pour a solution of this substance over a metal plate and allow it to cover the surface. A thin fluid coating adheres to the plate which soon dried and leaves behind a thin layer of asphalt. This film does not become darker in the light, but it loses by light its property of solubility in ethereal oils. If such a plate, therefore, is put in the place of the image on the camera obscura, the asphalt coating will remain soluble on the white spots where the image is intended to be. Then one has only to wash the plate in oil of lavender, the asphalt is washed off, and the image and the picture is secured.

In 1829 Neipce was joined in his experiments by Daguerre. After his death Daguerre carried on alone. He made experiments with iodide of silver plates which he produced by exposing silver plates to the action of iodine. These plates of iodide of silver were sensitive to light, but a very long exposure was necessary; and in order to get an image of a human being he would have had to sit motionless for several hours.

It is probable that Daguerre's experiments would have come to nothing like that of his famous colleague had he not quite by accident hit upon the process which afterward bore his name. He had placed in a closet several plates which he thought ruined because they had been exposed for too short a time. Upon opening the closet somewhat

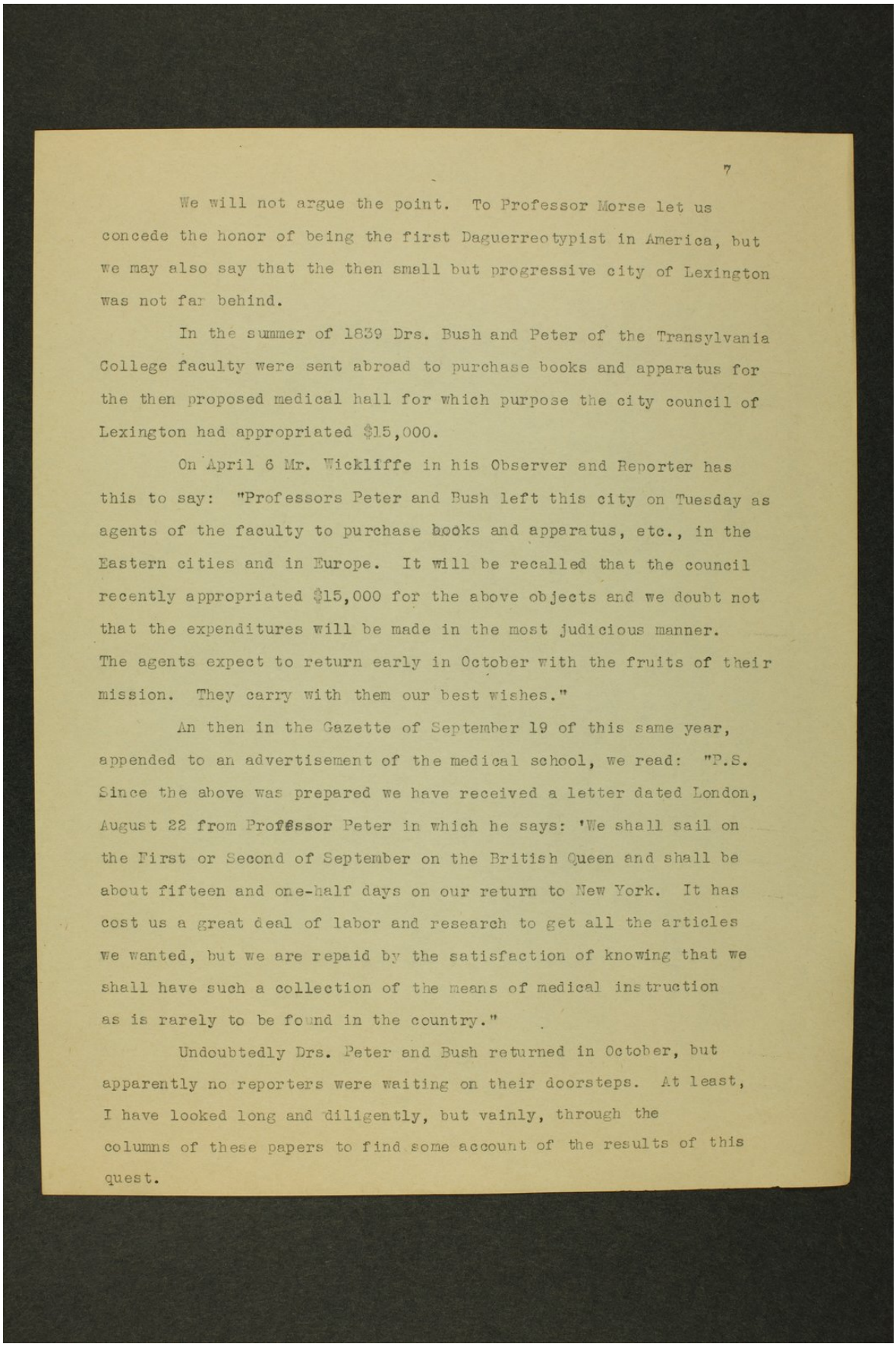
later he was surprised to find images appearing on the plates. He inferred that this was due to some chemical in the closet of which there were a number. So one by one he removed all the chemicals and still the images continued to develop. Then it was that he saw on the floor a dish containing mercury which he had hithertofore overlooked. To test the accuracy of his supposition he again took a plate that had been exposed to light for a short time in the camera obscura and on which no image was as yet visible. This he exposed to the vapour of mercury and an image appeared. Thus did Daguerre take the step beyond Wedgwood. The image was not only caught but fixed.

On the 19th of August, 1839, at the public seance in the Palias Mazarin, Daguerre in the presence of all the great authorities in art, science and diplomacy who were then in Paris, illustrated the process by experiment and gave the results of his efforts free to the World, having previously obtained a pension from the French government because of this achievement.

Quickly he gathered around him pupils from all parts of the globe and these returning to their homes spread the gospel of sun pictures in their respective localities. Germany was among the first to embrace this new art. Sachse, an art dealer living in Berlin, was initiated into Daguerre's discovery on the 22nd of April, 1839, and was appointed Daguerre's agent in Germany. In October the earliest types of Daguerrean apparatus were being sold in Berlin. The first set of apparatus was purchased by the Royal Academy of Industry at Berlin and is still to be seen there. The first objects photographed by Sachse were architectural views, statuary, and paintings, which for two years found a ready sale as curiosities. But in 1840 he began to take groups of persons.

In America, the painter, Morse, who later invented the Morse telegraph was the first Daguerreotypist. He was a visitor in Europe at the time the Daguerrean invention was announced. In writing about it to friends he says: "In 1838 I visited Europe with my telegraph invention, and early in the spring of 1839, in Paris, I formed the acquaintance of M. Daguerre, whose discovery of fixing the image of the camera obscura was creating a great sensation in the scientific world. At this time my telegraph was exciting a similar sensation. I had made arrangements to leave Paris in March 1839, and one morning, in conversation with our worth consul, Robert Walsh, esq., I lamented leaving Paris without seeing these photographic results. He at once entered into my feeling and said, "I think you may see them if you drop a note inviting Daguerre to see your telegraph."

"The plan was successful, M. Daguerre invited me to see his laboratory and the day after he came to witness the operation of my telegraph; and it is a notable incident that during the two hours in which he was with me his laboratory with his results were consumed by fire. In my interview with him, I requested, as soon as his pension bill was passed and the publication was made, to send me a copy of his manner or working, and accordingly in the summer of 1839 I received from him probably the first copy that came to America. From this copy, in which were drawings of the necessary apparatus, I constructed the first daguerreotype apparatus in the United States. My first effort was on a small plate of silvered copper procured at a hardware store and, defective as the plate was, I obtained a good representation of the Church of the Messiah, then on Broadway, from the back window of the New York City University. This I believe to have been the first daguerreotype made in America." The date was September 1839 and the time of exposure, fifteen minutes.



We will not argue the point. To Professor Morse let us concede the honor of being the first Daguerreotypist in America, but we may also say that the then small but progressive city of Lexington was not far behind.

In the summer of 1839 Drs. Bush and Peter of the Transylvania College faculty were sent abroad to purchase books and apparatus for the then proposed medical hall for which purpose the city council of Lexington had appropriated $15,000.

On April 6 Mr. Wickliffe in his Observer and Reporter has this to say: "Professors Peter and Bush left this city on Tuesday as agents of the faculty to purchase books and apparatus, etc., in the Eastern cities and in Europe. It will be recalled that the council recently appropriated $15,000 for the above objects and we doubt not that the expenditures will be made in the most judicious manner. The agents expect to return early in October with the fruits of their mission. They carry with them our best wishes."

An then in the Gazette of September 19 of this same year, appended to an advertisement of the medical school, we read: "P.S. Since the above was prepared we have received a letter dated London, August 22 from Professor Peter in which he says: 'We shall sail on the First or Second of September on the British Queen and shall be about fifteen and one-half days on our return to New York. It has cost us a great deal of labor and research to get all the articles we wanted, but we are repaid by the satisfaction of knowing that we shall have such a collection of the means of medical instruction as is rarely to be found in the country."

Undoubtedly Drs. Peter and Bush returned in October, but apparently no reporters were waiting on their doorsteps. At least, I have looked long and diligently, but vainly, through the columns of these papers to find some account of the results of this quest.

It is to the descendants of these gentlemen, then, together with the museum of this same Transylvania College that we learn what we know of the results of this journey. A camera with the necessary properties for making pictures was among the apparatus thus brought from Europe. The camera is a museum piece belonging to Transylvania and a daguerreotype labelled in Dr. Robert Peter's own handwriting "First Daguerreotype taken in Kentucky in 1839" is in the possession of Dr. Alfred Peter of the Kentucky Experiment Station. Dr. Peter has kindly consented to let me bring it to show you tonight. He recognizes it, he says, as a picture of the death mask of Talleyrand. One of the copper plates for the Daguerreotype which was among Dr. Peter's effects has also been loaned us by Dr. Alfred Peter. Another interesting possession of the Peter Family is a Daguerreotype sent them from London by a first cousin of their father's dated also 1839. He was walking along the street, he said, and seeing the sign went in since he wished to try something "new." This has been loaned me by Miss Joeanna Peter, and I have it with me here tonight.

The fact that the Daguerreotype was purchased for the medical college leads one to wonder if, indeed, it was ever used for the purpose of taking pictures of medical studies. In fact, it was so used by Dr. Bush and his associate Dr. Dudley. Dr. Barkley has some of these interesting daguerreotypes and has promised to show them to us tonight.

To return to the national phases of our discussion: Professor Morse continued his studies of the Daguerreotype in collaboration with Professor John W. Draper, first on top of New York University and later on the roof of a new building at the Northwest Corner of Nassau and Beckman Streets, New York, built for him by his brothers, Sidney and Richard.

Then with the discovery of the bromine process and the double objective lens by Prof. Petzval, of Vienna, which shortened both the time necessary for exposure and modified somewhat the direct sunlight in which a subject would have to sit, portraiture by means of the Daguerreotype became possible. Daguerre, when questioned by Morse, had expressed doubt as to the practicability of the use of his process for portraiture because of the length of time necessary for an exposure--Daguerre's first picture was of a tree, and the exposure was said to have taken from fifteen minutes to half an hour at the height of sunlight, a torture clearly not be endured by a subject. Professor Draper divides honors with A. M. Walcott, of New York, of being the first to take a portrait "with the eyes open" although Morse, himself, had previously taken them with the eyes closed.

By the time Morse was fairly started the Daguerrean process published in Paris had arrived in America. Then in the fall of 1839 the first teacher direct from Daguerre arrived in New York. It was Mr. Francois Gourand. Mr. Gourand came over for the express purpose of giving lectures on the process and brought with him improved French apparatus. He subsequently published "A Discussion of the Daguerreotype Process or a Summary of M. Gourand's published Lectures According to the Process of M. Daguerre", etc. To a modern accustomed to the soft lighting of our up-to-date studios these directions of M. Gourand are strange, indeed. For instance, he says, "the room in which the portrait is taken must be a Southeast one if possible, it must be plastered with the whitest kind of limeplaster and the subject should be dressed in a gray coat with pantaloons of a rather deep hue, the vest must be of a figured cloth, yellow or orange, if possible, and with figures of a color to give contrast, the whiteness of the shirt contrasting with the cravat of a gray ground

color a little less dark or more deep than the coat. The toilet of the ladies,"he says,"should be of the same sahde, and in all cases bl black must be avoided, as well as green and red."

Pupils from every walk in life flocked to Gourand. Morse and Draper also gave lessons for a while, and so there grew up in this country a body of Daguerreotypists.

Amateurs took up the making of pictures. Many young men of culture and intelligence embraced it as an avocation. One of these was the Rev. Edward Everett Hale who tells in a letter to a friend of how the plates cost $2.00 each and being without means he would often obtain the image and after exhibiting it to friends would polish the plate and use it all over again.

Washington Irving was much impressed by the Daguerreotype and wrote of it in the "Knickerbocker": "We have seen the views taken in Paris by the Daguerreotype, and I have no hesitation in averring that they are the most remarkable objects of curiosity and admiration that we have ever beheld. Their exquisite perfection almost transcends the bounds of sober belief." And a few months later in the "Knickerbocker" he says: "In commenting again on the Daguerreotype it is destined ultimately to be the companion of every man of taste, particularly in his travels." O, prophetic Irving! What an amateur photographer he might have made if living today.

By 1840 the Daguerrean process has been improved to the point where it was commercially practicable, knowledge of the process had also been widely diffused and with Yankee shrewdness many persons in all walks of life had seen its possibility as a means of livelihood and so photography, or rather "Daguerreotypy" became a profession. Studios were set up in all the large cities.

Messrs. Walcott and Johnson claim the distinction of opening the first gallery in New York. They were soon followed by others. Travelling vans were sent out from these larger cities to take pictures over the country side.

And such is the genius of our people that eleven years later America became the acknowledged leader of the world in this field. At the World's Fair in London in 1851 we were awarded the prize for our unparalleled exhibits. Then it became common in England, France and Germany to advertise the taking of Daguerreotypes by the "American process."

And what of the Daguerreotypists of our own community? Gazed at through the haze of ninety-four summers their names are as dim as the pictures which they made. Judging from the body of work that they left, there must xx have been many of them, skilled workers all, or else a few indefatigable craftsmen. Few or none of them apparently signed their work. Are we to suppose that these Daguerreotypes were made by the traveling vans sent out from the larger studios? Miss Moe Peter has furnished the name of three of these daguerreotypists: a Mr. Phipps whose studio was on the second floor at the wouthwest corner of Limestone and Main, accessible from an outside staircase; and a Mr. Hawkins whom Dr. Robert Peter records as having taken two of the family Daguerreotypes in 1846; and a Mr. Elrod. Perhaps you may know of others.

And now let us look for a moment at the Daguerreotype itself. It is a copper plate coated with chloride of silver and exposed in a camera for a specified period of time. It is then removed, given a bath of mercury to develop the image, and the portrait is complete, except, perhaps, for some retouching. Some of the Daguerreotypes were

gilded with gold to preserve them. A faint color was sometimes given to the features of the subject and a pin was often skilfully wielded to bring out the brilliants in hair and corsage. The Daguerreotype was then covered with a glass to protect the surface and placed, perhaps, in the quaint little plush case, which to me is half their charm. The size of the Daguerreotype varied from locket size to 13x14 inches and sold at from $1.50 to $15.00 each. The ordinary size was two and three-quarters by three inches, the price varying from $2.00 to $3.00.

If we are critically minded we could find much fault with the Daguerreotype. First there is that unsightly, often exasperating mirrorlike surface which obscures the image so that it can hardly be seen, no matter how it is turned.

The daguerreotype plate was extremely sensitive, recording the the image with often microscopic exactitude. This is not true, I believe, of the collodion plate and is undesirable, a lack of detail, especially in the background, being the aim of the portrait photographer rather than too much detail. Then again the daguerreotype could only be made singly. If one wished a dozen daguerreotypes then he must pose a dozen times.

No such drawbacks were felt in the 1840's. Immediately after the popularization of the Daguerreotype it was prophesied that all the portrait artists would die of starvation. The Daguerreotype in the words of Washington Irving, "transcended the bounds of sober belief."

Abraham Bogardes writing in Century magazine, May, 1904, says: "In its early days the general public looked upon the Daguerreotype as a wonder. Many amusing remarks were made at the door of galleries. A small frame containing a dozen specimesn would draw a crowd. One