



IMAGE

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HAPPY NEW YEAR! If photographers are ever happy it surely should be at the New Year. In the month of December the people seem to fall in love with their own faces, and are active in publishing their beauty. They come to the photographer, petting him and smiling peep into his magical box. And they leave with the photographer the most sweetly tinkling tokens of their approbation. These the photographer gathers together on the New Year's day, and he counts them, thus numbering his friends, and he is merry.

—*American Journal of Photography*, January 1, 1861.

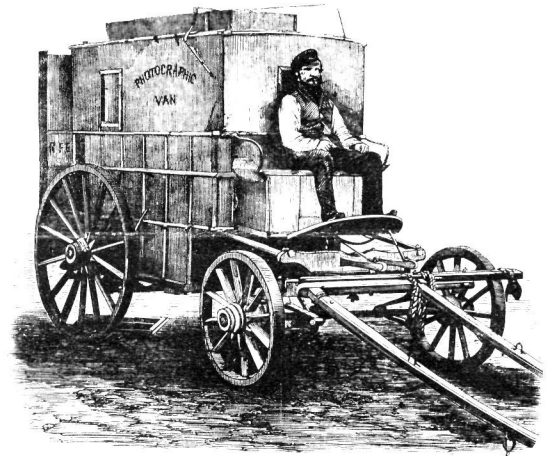
FENTON'S PHOTO VAN

ROGER FENTON, whose photography under the fire and of the very battlefields of the Crimean War in 1855 made him the first combat photographer, stated that his traveling darkroom was "the foundation of all my labors."

"The carriage," Fenton wrote in the March 1, 1856, issue of *Humphrey's Journal*, "began its career, in the service of a wine merchant at Canterbury [England]."

"When it entered into the service of Art, a fresh top was made for it, so as to convert it into a dark room; panes of yellow glass, with shutters, were fixed in the sides; a bed was constructed for it, which folded up into a very small space under the bench at the upper end; round the top were cisterns for distilled and for ordinary water, and a shelf for books. On the sides were places for fixing the gutta-percha baths, glass-dippers, knives, forks, and spoons. The kettle and cups hung from the roof. On the floor, under the trough for receiving waste water, was a frame with holes, in which were fitted the heavier bottles. This frame had at night to be lifted up and placed on the working bench with the cameras, to make room for the bed, the furniture of which was, during the day, contained in the box under the driving-seat. In the beginning of the autumn of last year, having hired in York a strong horse, we set forth on the road to Rivaulx Abbey in search of the picturesque.

"From the experience obtained in this journey, several modifications were made in the construction of the carriage, and it finally assumed the shape in which it appears in the photograph taken of it on the day on which it traveled down to the ravine called the Valley of the Shadow of Death: a picture due to the precaution of the driver on that day, who suggested that, as there was a possibility of a stop being put in the said valley to the further travels of both the vehicle and its driver, it would be showing a proper consideration for both to take a likeness of them before starting."



TRAVELING DARKROOM in which Fenton developed plates under fire in the Valley of the Shadow of Death during the Crimean War, 1855.

Elaborate as it was, the traveling dark room was merely part of Fenton's photographic equipment. "I took with me a camera for portraits fitted with one of Ross's 3-inch lenses, two cameras made by Bourquien, of Paris, of the bellows construction, and fitted with Ross's 4-inch landscape lenses, and two smaller cameras made by Horne, and fitted with their lenses, but in place of which I subsequently employed a pair of Ross's 3-inch lenses, with which I had previously worked.

"The stock of glass plates was, I think 700, of three different sizes, fitted into grooved boxes, each of which contained about twenty-four plates; the boxes of glass were again packed in chests, so as to insure their security.

"Several chests of chemicals, a small still with stove, three or four printing frames, gutta-percha bathes and dishes, and a few carpenter's tools, formed the principal part of the photographic baggage.

"In addition to the purely photographic preparations were several boxes of preserved meats, wine and biscuits, harness for three horses, a tent, one of Prices's candle stoves, a few tools, and a great many other smaller matters, likely to be useful, the whole being packed up in thirty-six large chests, which took up so much space on Blackwall Pier as to make me think with rueful forebodings of the sort of resting place they were likely to find on the shore at Balaklava."

In spite of all this impedimenta Fenton obtained over three hundred negatives in approximately four months in his role of war photographer. Exhibitions were held in London and Paris, and wood engravings of the more interesting scenes appeared in the *Illustrated London News*.

AMERICA'S FIRST PHOTOGRAPHIC MANUAL

by Frank Smith, Signal Corps Engineering Laboratories

Not long after the daguerreotype process was disclosed by the French Government at a public meeting in Paris on August 19, 1839, a small group of scientifically and mechanically minded men in New York City at once constructed equipment, prepared plates and chemicals, and began experiments. These pioneers included Samuel F. B. Morse, portrait painter and inventor of the electric telegraph, John W. Draper, Professor of Chemistry at the University of the City of New York, Alexander S. Wolcott, instrument maker, James R. Chilton, and D. W. Seager. In making their first photographic trials, they followed the directions which Daguerre gave in one chapter of his book published in Paris. To Dr. Chilton belongs the honor of having published the first separate edition of these working instructions to appear in America.

Born in New York City in 1808, he was a practising physician and chemist of note when the first news of Daguerre's invention crossed the Atlantic. He subsequently opened one of the first supply houses for photographic materials, and it is said that he backed Edward Anthony in his first commercial venture in that field. He also took daguerreotype portraits.

The manual which he published, an illustrated pamphlet of 16 pages, has only recently come to light. It is titled *Full Description of the Daguerreotype Process as published by M. Daguerre*, and bears the imprint New York, For Sale by J. R. Chilton, 1840. The only copies thus far located are in the Library of the U. S. Patent Office, in the George Eastman House, and in the collection of Alden Scott Boyer of Chicago. The text is reprinted from the periodical *American Repertory Arts, Sciences and Manufactures* for March, 1840. This was not the first time that Daguerre's work had been published in America; already the *Journal of the Franklin Institute*, in its November, 1839, issue had brought its readers a translation

from the pen of Professor J. W. Frazer of the University of Pennsylvania, and the *New-York Observer* gave over the entire back page of its November 2 issue for a complete reprint of an English translation which had just arrived from London on the crack steamer *Liverpool*. But this was the first time that the text was available in separate form.

Of even more interest than Daguerre's text are the editorial additions. An exposure table, prepared by D. W. Seager, may well be the earliest ever to be printed. It shows exposures varying from 5 minutes to 1 hour and 10 minutes! Already the first photographers were making improvements. "The preceding pages describe fully the process of Daguerre," the editor states. "It could not, however be supposed that the peculiar spirit of American enterprise would rest satisfied with this; and, accordingly, no sooner had those engaged in the experiments fully satisfied themselves that the process was practically given, than they almost immediately conceived it possible to effect similar results by more simple and less expensive means." Four improvements are noted: the substitution of a single meniscus lens for the costly combination of Daguerre, dispensing with the use of nitric acid, polishing the palate with rotten stone, and the substitution of a shallow iodizing box for the deeper one of Daguerre, thus shortening the time required to sensitize the silvered copper plate. Truly, Yankee ingenuity was working fast during those first few months of photography in America.

Besides this publication of Chilton's, another photographic manual, not dissimilar, was published in Boston at almost the same time. It is titled *Description of the Daguerreotype Process: or, A Summary of M. Gouraud's Public Lectures, according to the principles of M. Daguerre*, and bears the imprint of Dutton and Wentworth, Boston 1840. It is a resumé, rather than a translation, of Daguerre's instructions. The author, François Gouraud, had come to this country from France to peddle daguerreotype apparatus, and conducted public demonstrations in New York, Providence, Boston, and Niagara Falls. The George Eastman House has a complete daguerreotype outfit which he sold to Samuel Bemis in Boston on April 15, 1840. The exact date when his booklet was printed is not known: certainly it must have appeared after March 25, 1840, for an advertisement from a Boston newspaper of that date is reprinted in the text.

If Chilton acted with the characteristic Yankee speed of the day, it would not at all be improbable that he published Daguerre's manual immediately or shortly after its appearance in the *American Repertory* of March. If this assumption is correct, then Chilton should be credited with having published the first separate book on photography in America, thereby starting a long line of literature that was to follow.

STATE OF THE WEATHER.	HOURS OF THE DAY.						
	8	9	10	11 to 1	1 to 2	2 to 3	3 and after
Very brilliant and clear, wind steady from W. or N. W., very deep blue sky, and absence of red rays at sunrise or sunset. Time employed.....	15	8	6	5	6	7	12 to 30
Clear, wind from S. W., moderately cold, but a slight perceptible vapor in comparison with above. Time employed.....	16	12	7	6	7	8	15 to 40
Sunshine, but rather hazy, shadows not hard, nor clearly defined. Time employed.....	25	18	14	12	14	16	25 to 40
Sun always obscured by light clouds, but lower atmosphere, clear from haze and vapor. Time employed.....	30	20	18	16	15	20	35 to 50
Quite cloudy, but lower atmosphere, free from vapors. Time employed.....	50	30	25	20	20	30	50 to 70

FIRST EXPOSURE TABLE, compiled in New York by D. W. Seager in 1840, published with Daguerre's instructions in America's first photo manual.

The columns of IMAGE are open to all who are interested in tracing the development of photography. Unsigned articles which appear in these pages may be reprinted providing that credit is given the George Eastman House.

GOLD RUSH PHOTOGRAPHER

WHEN Robert H. Vance joined the great migration toward California in 1849, he went as a daguerreotypist equipped with camera, plates and chemicals, rather than a gold-miner's pick-axe, shovel and pan. On his return to the East in 1851 he placed on exhibition 300 daguerreotypes of views he had taken in the West. A contemporary account describes them; "On looking upon these pictures one can imagine himself among the hills and mines of California, grasping at the glittering gold that lies before him; wandering over the plains, along the beautiful rivers that flow into the California Gulf, or through the streets of San Francisco, Sacramento and Monterey." These have now, to our great loss, disappeared; they probably were destroyed in a fire in Fitzgibbon's St. Louis Gallery.

The following year Vance went back to California and set up a gallery in San Francisco, where his daguerreotypes, ambrotypes and tintypes decorated the walls of the fourteen rooms of his establishment. When paper photographs became the vogue he quickly mastered the new technique and was soon recognized as one of the outstanding photographers in the state.

Once again he returned to the gold fields, this time with glass and collodion instead of silver plates, iodine and mercury. A collection of prints by Vance from these 11 x 14 inch negatives are in the George Eastman House. They show temporary camps along the bars, the long flumes with their water wheels, and views of the California mining country. More dramatically than words they illustrate the tremendous efforts of the miners in their search for gold.

River mining was carried on extensively in the '50s. When miners had used up the gold in the banks of the rivers by pan-washing, rocker and long-tom methods, they formed companies in order to drain the very beds. A wooden flume, sometimes five miles long, built along one side of the river, carried the water and ran giant water wheels to pump the river bed dry. Between mid-summer when the water was low, and the first rains, there was only a short period for mining operations. Then a torrential downfall might wash away completely the dams, flumes and equipment. These losses were offset by occasional enormous profits. The Vance photographs provide a graphic record of this phase of gold mining in California.

Ansel Adams comments on the ability of Vance as a photographer in *A Camera in the Gold Rush*. "Mechanically, Vance was superb; his images are sharp and well-exposed. The orientation of his pictures indicate careful thought and selection of view-point; there is nothing casual or haphazard in his compositions. His selection of field and spacing of forms and areas are efficient and powerful. . . Photographers of today will surely benefit by study and critical evaluation of these excellent images. They will observe the clarity of line and edge, the simple arrangement of mass, the beauty and richness of tonal values. Above all, they will respond to the integrity and forthright simplicity of Vance's photography and to his devotion to the enduring qualities of the world about him."



GOLD MINERS drained the California rivers dry. Detail of photograph in collection taken by Vance in 1859.

THE INTERNATIONAL FEDERATION OF FILM ARCHIVES

THE International Federation of Film Archives, at its last Congress in Amsterdam in October, elected the George Eastman House a member.

The society, also known as the Fédération Internationale des Archives du Film, is made up of the principal film libraries of the world. It was founded in 1937 by the Museum of Modern Art of New York, the Cinémathèque Française of Paris, and the National Film Library of London. The present membership includes in addition to these founders, libraries in Belgium, Brazil, Czechoslovakia, Denmark, Holland, Iran, Italy, Poland, Sweden, Switzerland, and Uruguay.

The purpose of the Federation is to serve as a clearing house for the exchange of films and information about them.

This year's Congress, was particularly successful. Plans were laid for the publication of a union catalogue of films in the member libraries. It was proposed that each nation should prepare a list of those films which, in the opinion of its film librarians, are the most significant. These nominations, when collated, would serve as an index of international taste, giving a more rounded judgment than one critic alone could provide. Such an index could be used in establishing priorities in the collecting programs of each member.

Problems of film conservation are necessarily of prime importance to the archivists, and standardization of practice becomes possible by joint action. In the matter of duplication of existing films, the close cooperation of member libraries helps to avoid needless repetition.

While the main purpose of the Federation is archival, it maintains liaison with societies which have other interests in the moving picture. At the Amsterdam Congress were observers from the Bureau Internationale de la Recherche Historique Cinématographique, the International Scientific Film Association and the Club Cinématographique d'Enfants Cendrillon. At the close of the Congress, a new society, the Fédération Internationale du Film Indépendant, was organized, which will have as its goal the furthering of the production of experimental films which lie outside of commercial fields

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