Alexander Beckers, “My Daguerreotype Experience,” 13 April 1889

IN response to a request of your Chairman of the Executive Committee, Mr. J. B. Gardner, I hereby give you a brief outline of my daguerreotype experience.

The details of this senior branch of photography can interest you, I presume, only in such parts as have a bearing on the more recent modes of picture making. A comparison of these will show the progress of the half century we commemorate and also remind us of the centennial of the birth of Daguerre. The first daguerreotype I ever saw was made by Robert Cornelious, in Philadelphia. His laboratory was conspicuous, for on the outside could be seen a large mirror swung on a bracket to illuminate his sitters with reflected sun-light.

The use of bromine was not yet known in 1840; but Boudine introduced it soon after. The same year Robert Chilton called on my brother to make hyposulphite of soda, offering $4.50 per pound; stating that the French article, though very impure, cost $5 per pound to import. Thus the first hypo was made here, at the corner of 2nd street and Fourth avenue, the present site of the Young Men’s Christian Association. Orders for other daguerreotype chemicals quickly followed, and in 1843 Louis Beckers was the first to manufacture these chemicals exclusively, at Old York Road, Philadelphia.

The same year (1843) I entered the daguerreotype business of Mr. Frederick Langenheim, in the Merchants’ Exchange of Philadelphia. Here there was little to be seen of the things you see now in a photo gallery. A kind of hiding-place for a dark room and a spyglass-like camera were the only indications of the mystery I was to learn. The camera rested on a candlestick-like tripod, with three set screws for adjustment, and was placed on an ordinary table. To interchange the ground-glass and round daguerreotype plates, it was necessary to unscrew a flanged ring and replace the same by a reverse motion. For the adjustment of focus there was the rack and pinion, as Voigtlander’s instruments still have. This instrument was one of the first made according to the mathematical calculations of Professor Petzval, of Vienna, having two achromatic lenses. One of these instruments was sent by young Voigtlander to his college mate, William Langenheim, as a present, with supplies and instructions, but also with the warning not to attempt daguerreotyping unless he had courage enough to try five hundred times more after failing in the first hundred pictures. This young lawyer, William Langenheim, proved not
to have the courage, but his brother Frederick had, and succeeded so well that he was
offered six hundred dollars for that odd camera. The preparing of daguerreotype plates
will not interest you much, though I should state that the production of a chemically clean
surface on silver is a difficulty that increases four-fold with the size of the plate. Another
difficulty is the use of the chemicals in a volatile state. The iodine can be controlled by
sight with faint day-light; but the bromine only by even temperature and constant
practice. The round plates were used only for a short time, and so far as I know
Langenheim was the first to introduce a square camera, plates and holders; also a tripod
in place of a table. In the summer of 1843 the first dozen of small Voigtlander objectives
were imported. One of these, I believe, is still in the possession of Mr. J. B. Gardner.
Soon after four large ones, for 6x8 pictures, were imported. In the fall of that year Philippe
Haas [Philip Haas—ed.], formerly of Paris, showed Fizeau’s method of fixing the image
on the plate by cold gilding. Shortly after this it was found that the picture could be
gilded in much less time and made more brilliant by heating the plate while the gold
solution was on it, and so Fizeau’s method went entirely out of use. During the winter of
1843 the first polishing wheel was made. It was constructed like an ordinary grindstone,
the wheel being cushioned and then covered with buckskin. With the aid of this machine,
and after weeks of hard labor, we succeeded in making the first 6x8 daguerreotype.
At this time the only sizes used with any degree of success were 3x4 and 5\(^{\circ}\) x 4\(^{\circ}\). There
were also many plates used two sizes smaller that were designated as sixths and ninths.
At that time we also succeeded in making a picture of a sick lady at her own residence,
which was then deemed impossible.

In the spring of 1844 Mr. Edward White bought one of the large Voigtlander
instruments, and for him I made the first large daguerreotype in New York City, at 175
Broadway. There were then only a few daguerreans in the city. They were J. Gurney,
Anthony, Edwards & Chilton, Van Loan, Burgess, and a few others I cannot recall. I
remained with Mr. White until December, 1844, when it was impossible to make a
picture on account of the severe cold, for my employer would not allow a fire in his place
over night. Then I commenced business for myself at the corner of Nassau and John
streets, and after May, 1845, at 201 Broadway, under the firm of Langenheim &
Beckers, agents for Voigtlander & Louis Beckers.

At that time the large Voigtlander objectives had a chemical and a visual focus, so
that in order to make a picture sharp the lenses were moved out one-eighth of an inch.
This we soon after rectified by having the ground-glass of the camera set permanently
one-sixteenth of an inch nearer the lens than the sensitive plate.

That summer I took a view of High Bridge, before the scaffolding was removed. This
picture was made for the engineers, and was perhaps the first taken in this country in aid
of architecture.

By taking out-door views, I soon discovered that the plate increased in sensitiveness
by not exposing it immediately after sensitizing. I found, however, that any very long
delay (say for three hours or more) made the plate entirely useless. In 1847, the optician,
Fitz, Sr., made for me a speculum metal mirror, with which I was enabled to avoid the
inversion of my pictures. For many faces and objects this was a great advantage, though
it doubled the time of exposure. This mirror was attached to the instrument at an angle of
forty-five degrees, and so well did it serve my purpose that I continued to use it for a
number of years.

In 1848 Langenheim bought Fox Talbot’s patent for the United States at six thousand
dollars, but financially it proved a failure, as this process never became popular in this
country. Why it should not prove a success is quite evident when we remember how
infinitely superior the daguerreotype was to any sun picture made on paper. In England
Talbot’s process could be received with greater favor, as it did not come in competition with the daguerreotype as made in America. It is true that the daguerreotype was made in many of the large cities of Europe, but in none of these could it compare with the work of this country. The daguerreotypists here took the lead in the beginning; and up to the time when the collodion process became popular, never allowed themselves to be excelled by any other nation.

In 1849 my firm was changed to Beckers & Piard. Having now more time, we succeeded in constructing a machine for cleaning plates in one-third the time required by hand.

In 1852 we contrived a method for making four pictures on one plate, and in such a way that the exposed quarter was in the center of the field of the lens. To us this was a very useful improvement, for locket pictures were then in great demand. In 1856 Mr. Ormsby [Ormsbee—ed.] obtained a patent for this same multiplying plate-holder, and collected considerable money on it, until my priority claim proved his to be void. The production of stereoscopic pictures was the next task. Marsher [Mascher—ed.], of Philadelphia, made patent cases to show these portraits in a very neat manner. In 1854 F. Langenheim commenced the manufacture of stereoscopic views on glass. He sent me three dozen, to find sale for them in New York. At the first exhibition of these pictures one-third of them were broken. This loss set me to thinking how to contrive an arrangement to show and secure the pictures against breakage, and in 1857 I obtained a patent for my revolving stereoscope. The increasing demand for this machine induced me to sell my daguerreotype business in 1858.

Thus being relieved from catering to the vanity of humanity, my career as a daguerrean was ended.

HOBOKEN, March 4, 1889.

[End of text.]

EDITOR’S NOTES:
A variant of this text was published in Alexander Beckers, “Fifteen Year’s Experience of a Daguerreotypy,” Photographic Times and American Photographer (New York) 19:391 (15 March 1889): 131–32. The present text includes additional comments lacking in the Photographic Times transcription.

The mention of Boudine in regards to the introduction of bromine is curious; the name is otherwise absent in photographic history.

A replica of the 1841 Voigtländer “spyglass-like camera” described in Beckers’ text is viewable on the Camerapedia.org web site.

