Alexander Beckers, “Fifteen Years’ Experience of a Daguerreotyper,” 15 March 1889

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FIFTEEN YEARS’ EXPERIENCE OF A DAGUERREOTYPER.

[Read before the Society of Amateur Photographers of New York.]

The first daguerreotype I saw, was made by Robert Cornelius, in Philadelphia. His laboratory was conspicuous. On the outside could be seen a large mirror, swung on a bracket, for illuminating his sitters with reflected sunlight. The use of bromine was not known in 1840, but Boudine introduced it soon after. In the same year Robert Chilton called on my brother to make hyposulphite of soda, offering four and a half dollars per pound, stating that the French article cost over five dollars to import, although still impure. Thus the first hypo was made here at the corner of Twenty-third Street and Fourth avenue, the present site of the Young Men’s Christian Association. Orders for other chemicals followed, and in 1843 Louis Beckers was the first to manufacture photographic chemicals exclusively, at Old York Road, Philadelphia.

In the same year I entered the daguerreotype business of Mr. Fred Langenheim, in the Merchant’s Exchange of Philadelphia. Here there was little to be seen of the things you see nowadays in a photographic art gallery. A kind of a hiding-place for a dark-room, and a spyglass-like camera were all the 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 plate, it was necessary to unscrew a flanged ring, and replace the same by a reverse motion. For the adjustment of the focus, there was the rack and pinion, as Voightlander’s instruments still have. This instrument was one of the first made according to the mathematical calculations of Professor Petzval, of Vienna, having two acromatic lenses. It had been sent by young Voightlander to his college-mate, William Langenheim, as a present, with supplies and instructions, but also the warning not to try daguerreotyping, unless he had courage enough to try five hundred times more after failing with the first hundred pictures. William Langenheim, a lawyer, did not have the courage, but his brother Fred had, and succeeded so well that he was offered six hundred dollars for that odd camera.

The manipulations of preparing a Daguerreotype plate will not interest you much. I should state, however, that the production of a chemically clean surface on silver is a difficulty that increases fourfold 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 daylight, but the bromine only by even temperature and constant practice.

At Langenheim’s, necessity soon introduced a square camera, with square plates and holders. A high tripod was also used in place of the table. In the summer of 1843 the first dozen of small Voightlander objectives, such as are still on the market, were imported. Soon after, four larger ones, for 6x8 inch pictures, arrived. In the Fall of that year, Phillip Hass, formerly of Paris, showed Fizeau’s method of fixing the image on the plate by cold gilding. Soon after, the picture was made more brilliant by heating the plate while the gold solution was on it. In that winter the first polishing wheel was made. It was constructed like an ordinary grindstone, worked by a treadle, the wheel being cushioned and covered with buckskin. With the aid of this machine, and after weeks of hard labor and many experiments, we succeeded in making the first good large Daguerreotype of 6x8 inches, called whole size; half and two-thirds size were advertised and made with success. At that time we also succeeded in making a picture of a sick lady at her own residence, which had been considered impossible.

In the spring of 1844 Mr. Edward White bought one of the large Voightlander instruments, and for him I made the first large Daguerreotypes in this city at 175 Broadway. There were then but a few Daguerrians here. They were Gurney, Anthony, Edwards & Chilton, Augustus Morand, Von Loan, Burgess, Brush, Weston, Artho, Trisley, Plumb [Plumbe—ed.], myself, and others I cannot recall.

I remained with Edward White until December, 1844, when it became impossible to make a picture in his operating-room on account of the extreme cold, for Mr. White would not allow a fire in the 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 Voightlander & Louis Beckers.

At that time, the large Vogtlander objectives had a chemical and a visual focus, so that in order to make a large, near picture, the lenses were moved out one-eighth of an inch, while for usual work the ground-glass was set permanently one-sixteenth of an inch nearer the plate. That summer I took a view of High Bridge before the scaffolding was removed. This picture was taken for the engineers, and was perhaps the first one ever taken here in aid of architecture. By taking out-door views, I discovered that the plates increased in sensitiveness with the time between the preparation and exposure.

In 1847, I began to use a speculum metal mirror, in order to have my pictures not inverted. For very unsymmetrical faces, this arrangement was quite indispensable in order to get a likeness. The mirror was attached to the instrument at an angle of 45 degrees. The use of the mirror required double the time of exposure. It was made by Fitz, Senior, the optician, and was used for years after.

In 1848 Fred Langenheim bought the Fox-Talbot patent for the United States, at six thousand dollars. He introduced it here and failed in the undertaking.

In 1849 my firm was changed to Beckers & Piard. Having now more time, we succeeded in substituting machinery for cleaning our plates, and thus obtained cleaner and better plates in one-third the time required by hand.

In 1852 M. M. Root [M. A. Root—ed.], of Philadelphia, made two pictures on one plate ; we succeeded in making four on one plate, and in such a way that the exposed quarter was in the centre of the field of the lens. It was then a great relief, as locket pictures were in fashion. In 1856, Mr. Ormsbee patented this same multiplying plate-holder and collected considerable money on it, until my priority made his claim void, in the law suit brought as a test.
The production of stereoscopic portraits was the next task. Marchner [Mascher—ed.], of Philadelphia, made patent cases to show these pictures in a very neat way. In 1854 F. Langenheim had commenced to manufacture stereoscopic views on glass. He sent me three dozen of his make, to find sale for them here. At the first exhibit of these pictures, one dozen of them were broken. This loss set me to thinking how to find 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 I was relieved from satisfying the vanity of each individual beauty of this world, and ended my career as a Daguerrean.

Alexander Beckers.

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