

D. J. Kellogg,
Photographic Instrument,
No 15,809, *Patented Sept. 30, 1856.*

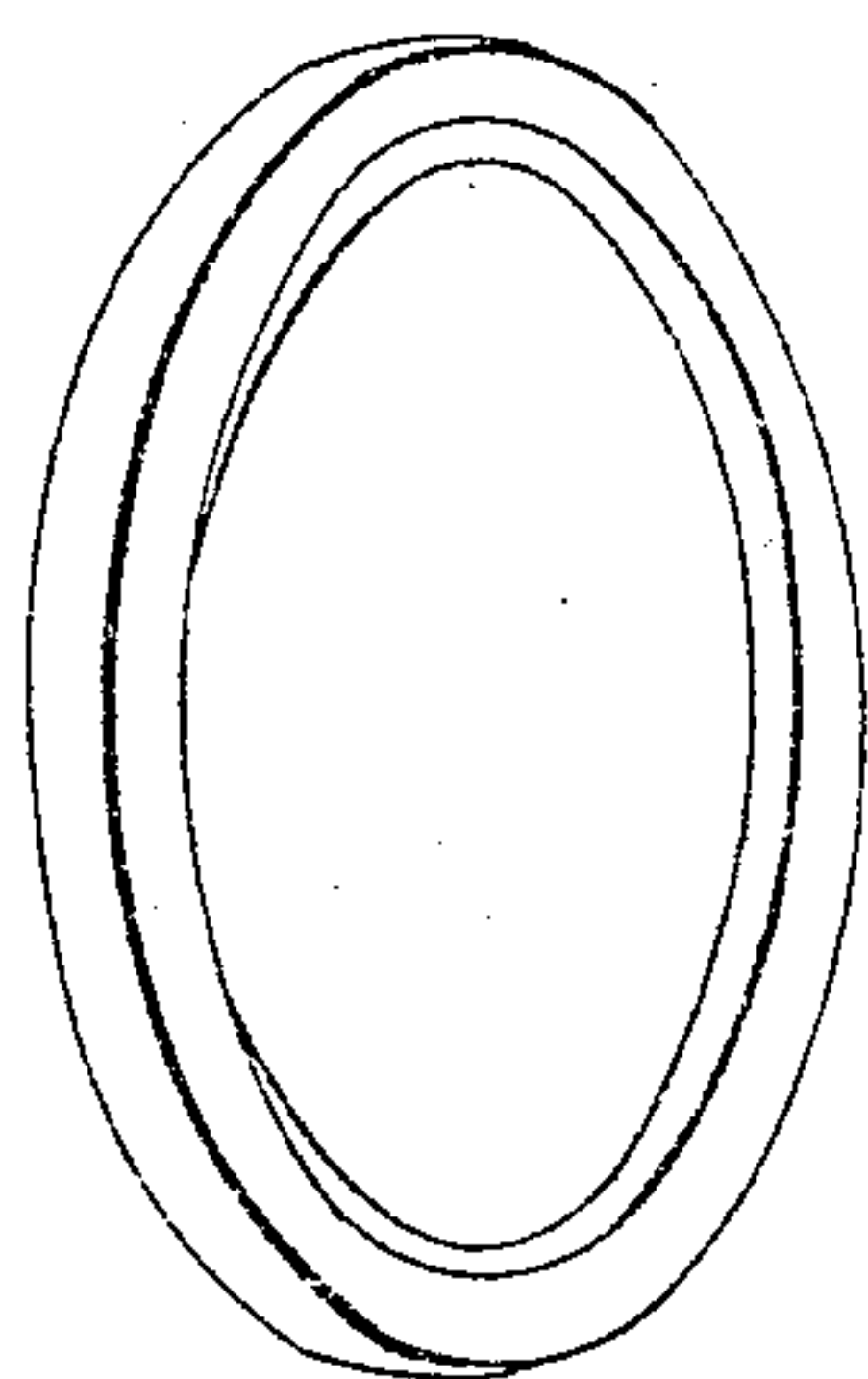


Fig. 3.



Fig. 4.

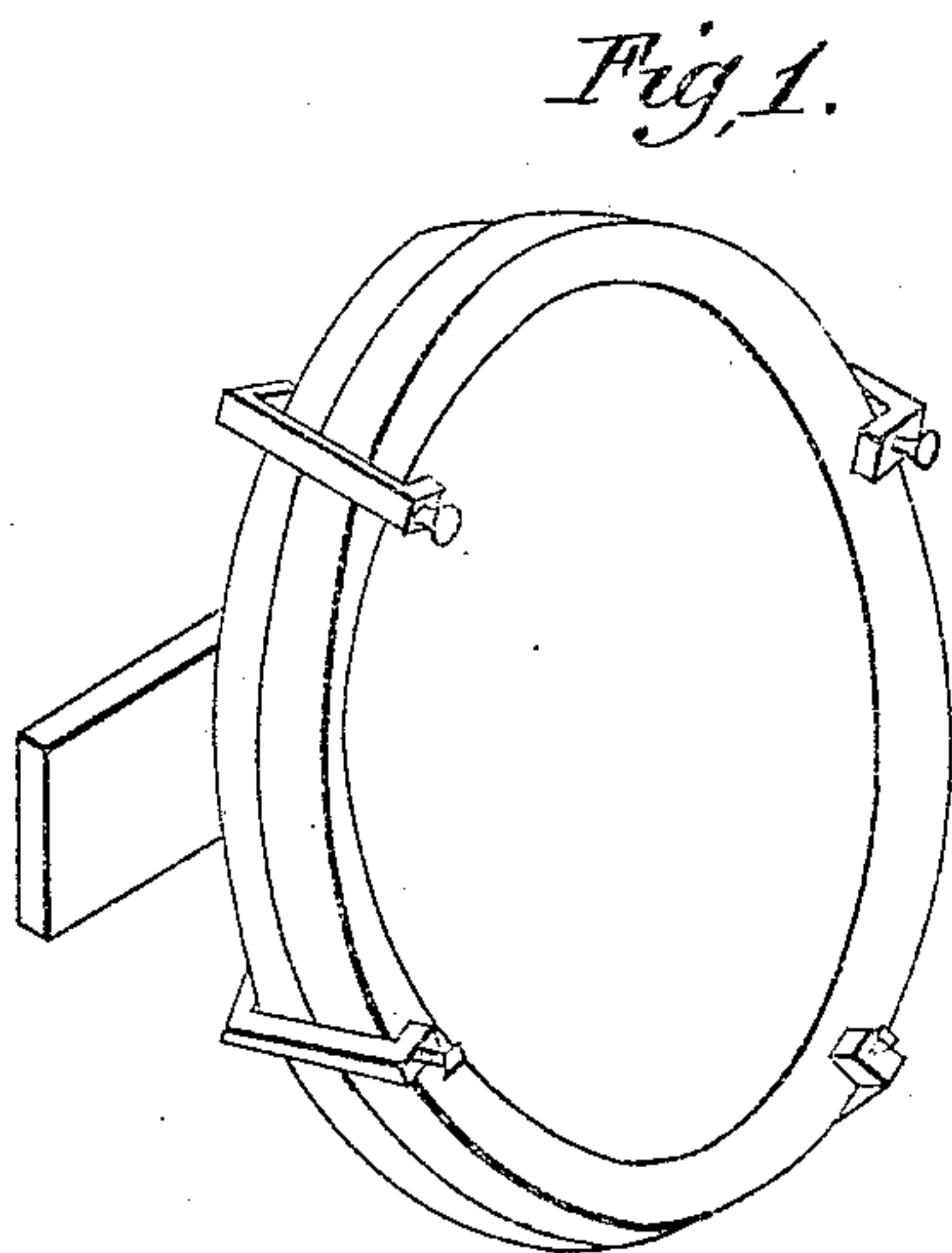


Fig. 1.

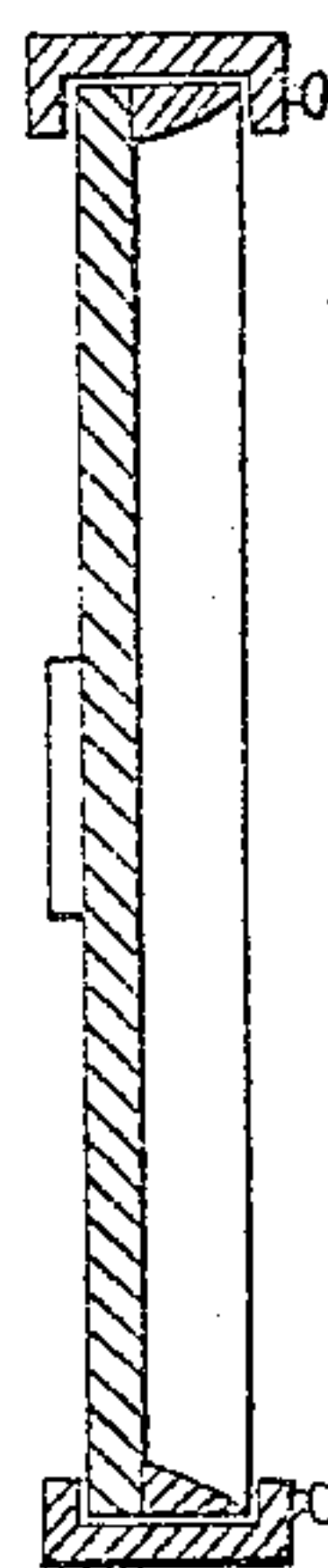


Fig. 2.

UNITED STATES PATENT OFFICE.

DANIEL J. KELLOGG, OF ROCHESTER, NEW YORK.

PHOTOGRAPHIC INSTRUMENT.

Specification forming part of Letters Patent No. 15,809, dated September 30, 1856.

To all whom it may concern:

Be it known that I, DANIEL J. KELLOGG, of the city of Rochester, county of Monroe, and State of New York, have invented certain new and useful Improvements in Photographic Processes and Instruments, of which the following is a full and accurate description, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon.

This improvement has reference chiefly to large pictures on paper or on canvas and designed to be painted; and the nature of the invention consists in an improved mode of impressing and developing a photograph directly on the canvas or paper from a small picture taken in the usual way. To do this I proceed in the following manner: The canvas, of any size, having been prepared as if for artist's use, is evenly coated with two coats of a varnish composed of asphaltum and turpentine and of proper consistence. To each pint of which varnish a tea-spoonful of chloride of sodium has been added. When dry, the canvas thus prepared must be washed with alcohol mixed with about one-fourth water and cotton wool. I then take a cast-iron ring of the size and shape of the canvas and clamp it thereto, as represented in Figures 1 and 2. This ring is coated with the asphaltum varnish or any other which will resist the action of the chemicals, and is so firmly clamped to the canvas that the two form together a water-tight basin, of which the canvas forms the bottom. A sufficient quantity of iodized collodion is then poured into the basin thus formed, and after thoroughly wetting the canvas the superfluous collodion is poured off. When the coating of collodion thus imparted

has set, a solution of silver such as is used in producing "ambrotype pictures," so called, composed of twenty grains of nitrate of silver, one grain iodide of potassium, and one ounce of water is poured into the ring, and after a few minutes (from four to five) is poured off. The canvas is now ready for the action of the light, to which it is exposed in any well-arranged apparatus. As the groundwork of my picture is dark, however, I bring the canvas or paper into focus in the following manner: On a ring of wood or other material I stretch a sheet of any thin, white, or opaque material—such as thin white paper—and place this on the canvas, which is then moved into focus or until the image is cast distinctly on the white paper stretched on the ring or hook. On removing this sheet of paper the canvas will remain in proper focus, with the exception of the thickness of the paper on the stretcher, which is of no consequence. After being duly exposed to the light the picture is developed by means of the following solution: One ounce of iron, one pint of water, two ounces acetic acid, and one ounce alcohol. It is then rinsed with water and fixed with a solution of cyanide of potassium, such as is ordinarily used in photographic processes.

Having thus described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

My method of converting the canvas itself into a basin by means of the metal rings, Figs. 1 and 2, as described.

DANL. J. KELLOGG. [L. S.]

Witnesses:

JOHN PHIN,
A. K. AMSDEN.