

Patented June 18, 1878.

Fig. 4.

The diagram shows a longitudinal section of a mechanical assembly. A central shaft, labeled 'a', passes through a housing. The housing is labeled 'B' at the left end and 'D' at the bottom. The shaft is supported by bearings, labeled 'f', and has a component, labeled 'e', at the right end. The shaft is shown with a cross-hatched pattern, indicating it is a solid part. The housing is shown with a solid pattern, indicating it is a cast or machined part. The bearings are shown with a dashed pattern, indicating they are separate components. The component 'e' is shown with a solid pattern, indicating it is a separate component. The shaft is shown with a cross-hatched pattern, indicating it is a solid part. The housing is shown with a solid pattern, indicating it is a cast or machined part. The bearings are shown with a dashed pattern, indicating they are separate components. The component 'e' is shown with a solid pattern, indicating it is a separate component.

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## IMPROVEMENT IN PHOTOGRAPHIC PRINTING-FRAMES.

Specification forming part of Letters Patent No. **205,146**, dated June 18, 1878; application filed January 31, 1878.

*To all whom it may concern:*

Be it known that I, EARL M. SEITZ, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and Improved Apparatus for Photograph-Printing, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of the apparatus embodying my invention. Fig. 2 is a top or plan view thereof. Fig. 3 is a plan view of the frame employed. Fig. 4 is a transverse section thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to an improved construction and arrangement of parts in a machine for photographic printing, as herein-after more fully described and claimed.

Referring to the drawings, A represents a trestle or support, and B a photographic printing-frame, which is journaled, as at *a*, to cross-bars C, whose ends are provided with rollers *b*, adapted to run on the side pieces of the trestle. Within the frame B there is fitted a plate of glass, *d*, and a pad, *e*, and to the back of the frame there are hinged cleats D, on whose inner faces are pieces of rubber or springs *f*, which bear firmly but softly against the pad *e*; and, in order to hold the cleats in position, I employ hooks or other fastenings, *g*, which, connected to the frame B, engage with the cleats.

The operation is as follows: The frame supported on the cross-bars C is turned on its axis *a* so that the cleats D are uppermost. The cleats are now thrown up and the pad *e* removed. The drawing to be copied is prepared, in any suitable manner, on tracing muslin, linen, paper, or other transparent ma-

terial, is now placed on the glass *d*, a piece of sensitized paper laid against the drawing, the pad *e* rested against the back of the sensitized paper, and the cleats D are restored and fastened. During these manipulations the frame B is prevented from turning by means of buttons *h*, pivoted to the cross-bars C. The buttons *h* are now moved from the frame, and the latter rotated on its axis on the bars C so that the glass *d* is uppermost, the buttons *h* being again applied to the frame. Then the frame, with the picture exposed, is run out on the trestle into the light, and the photographic printing of the picture will then be accomplished, said picture being reproduced on the sensitized paper. The frame is afterward brought in and opened, the copy removed, a fresh piece of sensitized paper applied, and the other stated operations repeated.

It will be seen that pictures may be reproduced rapidly and cheaply and to an indefinite number of copies, and the apparatus possesses many conveniences which will be appreciated by those familiar with the art.

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

In a photographic printing apparatus in which the glass plate and pad are secured within a reversible frame, the combination and arrangement of the hinged cleats D with springs *f*, adapted to bear against the pad, and the frame B, pivoted to the bars C, which are provided with wheels and adapted to travel upon the trestle-work A, substantially as shown and described.

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Witnesses:

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