D. Shive,

Photographic Printing Frame,

No. 52,896. Patented Feb. 27, 1866.

Fig: 1.

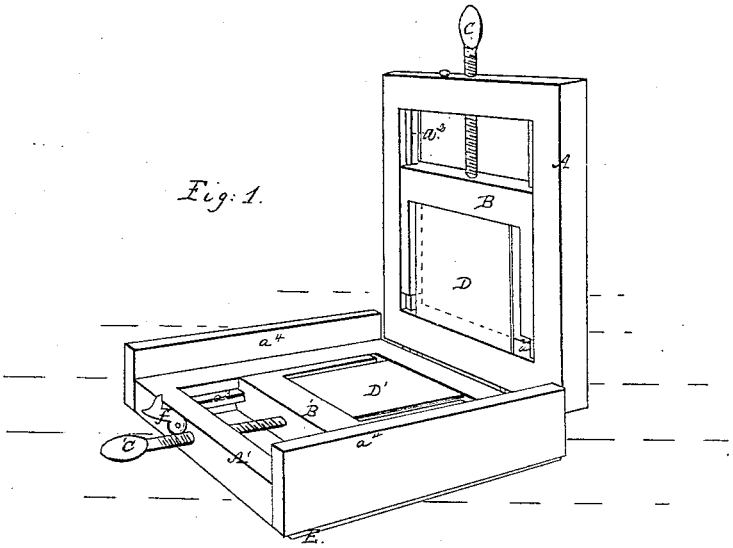
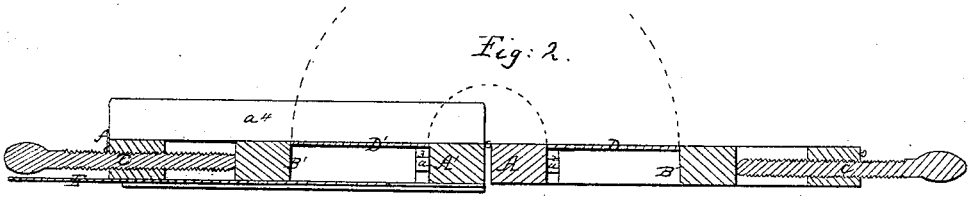


Fig: 2.



Witnesses:

Jno. H. Simmons

Inventor:

David Shive

UNITED STATES PATENT OFFICE.

DAVID SHIVE, OF PHILADELPHIA, PENNSYLVANIA.

PHOTOGRAPHIC PRINTING-FRAME.

Specification forming part of Letters Patent No. 52,896, dated February 27, 1866.

To all whom it may concern:

Be it known that I, DAVID SHIVE, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Photographic Printing-Frame; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the frame half opened, and showing the relative positions of the negative and the plate to be printed upon, and Fig. 2 a central vertical section of the same parts fully opened, like letters of reference indicating the same parts when in both figures.

The object of my invention is to afford a simple and accurately-working printing-frame for the use of photographers, whereby the operator can, at will and with the greatest facility, separate and close together again the two plates in examining the progress of the printing without any risk of disturbing the relative positions of the same in the frame.

It consists, substantially as hereinafter described and specified, in combining with a frame having two parts hinged together a pair of slides, each operated by a hand-screw in the frame, so as to serve to clamp the two opposite edges of the respective plates between the slides and the frame and hold them firmly in such a manner that their faces can be either separated or brought together in the same plane at the will of the operator without disturbing their relative positions, as aforesaid.

My invention also consists in the application to one of the parts of a two-part photographic printing-frame of side guides, so that they will receive the other part accurately between them in closing the said two parts together, for the purpose of insuring greater accuracy in the closing together of the same.

In the drawings, A and A′ are the two parts of the frame, hinged together, B and B′ their respective slides, C and C′ their respective operating-screws, and D and D′ their negative and opal plates as clamped between their respective slides and the two parts of the frame.

The part A is simply a rectangular frame of hard wood, having tongues a^2 a^2 along on its two opposite inner sides for supporting its respective slide B.

The bottom part, A′, is also a rectangular frame of hard wood, and is of the same size as the part A. It is provided with side tongues, a^3 a^3, and also with two raised or upright side pieces, a^4 a^4, which serve the purpose of guiding and keeping in more perfect oppositeness the two united parts A and A′ of the frame in closing them together. It is also provided with a pasteboard or thin wooden slide, E, which, when inserted, as in Fig. 1, closes the open bottom of the frame and prevents the entrance of light from below it. In Fig. 2 it is shown as partially withdrawn.

The slides B and B′ are also made of wood, and to fit the width of the open spaces in the respective parts A and A′ of the frame, and with their top and bottom sides flush therewith. They are also provided with suitable grooves in their outside edges, which receive the tongues a^2 a^2 and a^3 a^3 respectively, and are, besides, made short enough to allow the plates D D′ to be respectively inserted horizontally between them and the parts A and A′ of the frame.

The hand-screws C and C′ are made to be easily rotated by hand through the middle of the free end of each of their respective parts A A′, and consequently, with their inner ends bearing against the slides B B′, enable the operator to clamp the plates D D′ between the latter and the parts A A′.

The whole frame is stained or painted dead black for the purpose of avoiding all reflection of light.

The upper part, A, of the frame is intended to hold the negative plate D, while the lower part, A′, holds the opal, glass, or other plate, D′, intended to be printed upon. In using this frame the operator opens it afficiently wide and places the inner side of the part A down upon a table or other even flat support, and, retracting the screw C and slide B, places the negative plate D down flatly upon the said table or support and between the slide and the frame, and finally screws up the slide so as to clamp the said negative plate firmly by its two opposite edges between the slide and the part A of the frame, as seen in the drawings. He now lifts the whole apparatus, closes together the two parts A A′, securing them closely together by means of the catch-hook *f*, and replaces it upon the table, and, with its bottom side up, withdraws the slide

E and lays the opal plate D′ directly and firmly down upon the negative plate D, and, holding it in oppositeness therewith, screws up the slide B′, and thus secures the said plate firmly between the latter and the part A′ of the frame. He now returns the slide-board E into its normal or closed position, and closing the two parts A and A′, the apparatus is ready for printing, which operation, being well known, it is not necessary here to describe.

It will be readily seen that this frame will enable the operator to adjust both of the plates D D′ with the greatest accuracy and facility, and also to quickly inspect, from time to time, the progress of the printing without any danger or risk of disturbing the original positions of the said plates.

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

1. In combination with the frame, having two parts hinged together, as shown, the slides B B′ and screws C C′, the same being constructed and arranged to operate together substantially as and for the purpose described.

2. The application of the side guides, a^4 a^4, to one of the parts A or A′ of a photographic printing-frame, so as to operate in the manner described, for the purpose specified.

DAVID SHIVE.

Witnesses:
BENJ. MORISON,
JNO. SIMMONS.