

N. F. ENGLISH.
PHOTOGRAPHIC PRINTING FRAME.

No. 47,063.

Patented Mar. 28, 1865.

Fig: 1.

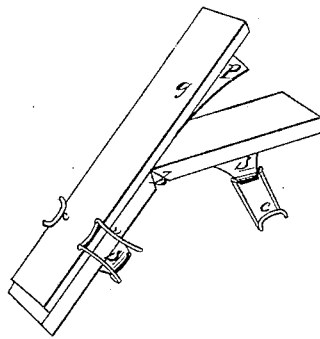


Fig: 3.

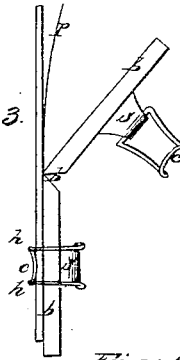


Fig: 2.

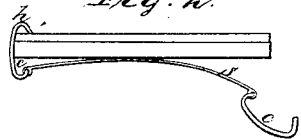


Fig: 4.

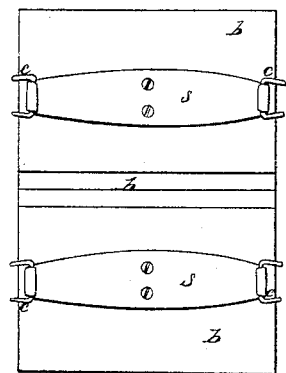
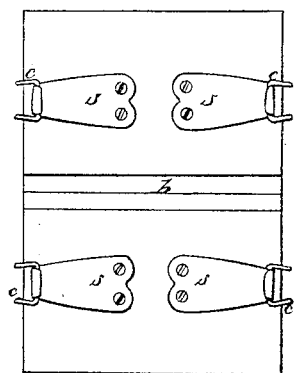


Fig: 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

NATHAN F. ENGLISH, OF HARTLAND FOUR CORNERS, VERMONT, ASSIGNOR
TO HIMSELF, AND JOSEPH N. LADD, OF NEW YORK, N. Y.

PHOTOGRAPHIC-PRINTING FRAME.

Specification forming part of Letters Patent No. 47,063, dated March 28, 1865.

To all whom it may concern :

Be it known that I, NATHAN F. ENGLISH, of Hartland Four Corners, in the county of Windsor, in the State of Vermont, have invented a new and useful Improvement in Photographic-Printing Apparatus; 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 annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the apparatus complete. Fig. 2 is an end, Fig. 3 a side, and Fig. 4 is a back, view of the same. Fig. 5 shows a modification in the form of springs for large negatives, and is a back view.

My invention consists in providing the hinged pad or jointed back *b*, which serves to hold the paper *p* against the negative with springs *s s s*, to which are attached certain hooks or clasps *c c c*, forming flexible clamps, by the use of which the cumbersome circum-scribing frame heretofore employed is dispensed with and the whole apparatus rendered much lighter to handle and more economical to construct, while at the same time ready access can be obtained to the paper receiving the impression, as is shown in Fig. 1.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct the back board or pad *b* in the ordinary manner, with a cloth or other flexible lining, which serves as a hinge. (See Figs. 1 and 3.) To the back of the pad *b*, I secure the flexible bars or springs *s s s*, the ends of which are provided with hooks or clasps *c c c*, hinged to the ends of the springs *s s s* in such a manner that the clasps or hooks can be made to

grasp the glass negative and to compress it upon the pad or hinged back *b*, as shown in the lower part of Fig. 1; or they may be readily disengaged, allowing that part of the pad to be swung back for examination of the paper *p*, as shown in the upper part of Fig. 1, as occasion may require. When the glass negatives are small, I prefer to make the springs *s s* in one piece, reaching across the back of the pads *b*, as shown in Fig. 4; but when the negatives are large, they may be made as shown in Fig. 5, and increased in number to any desired extent.

It will be observed that the clasps *c c c*, Figs. 2 and 3, have horn-like projections *h h* upon them, or so formed of wire as to give these projections, which are for the purpose of protecting the glass negative from contact with the surface upon which the apparatus may rest when the glass side is downward.

I do not confine myself to the precise form of hooks herein described, and shown upon the drawings, as wire springs may be used instead of flat springs, and clasps or hooks of solid metal or plate bent into the proper form may be substituted for wire clasps shown in the drawings.

I do not claim the invention of a back board or hinged pad; but

What I claim, and desire to secure by Letters Patent, is—

The combination of clamps formed by hooks or clasps hinged to the ends of springs, with a printing board or pad, substantially as and for the purpose herein set forth.

NATHAN F. ENGLISH.

Witnesses:

BENJ. F. LABAREE,
ALBERT B. BURK.