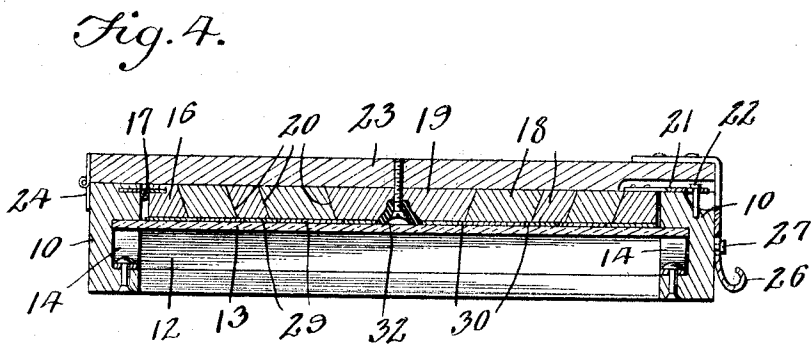
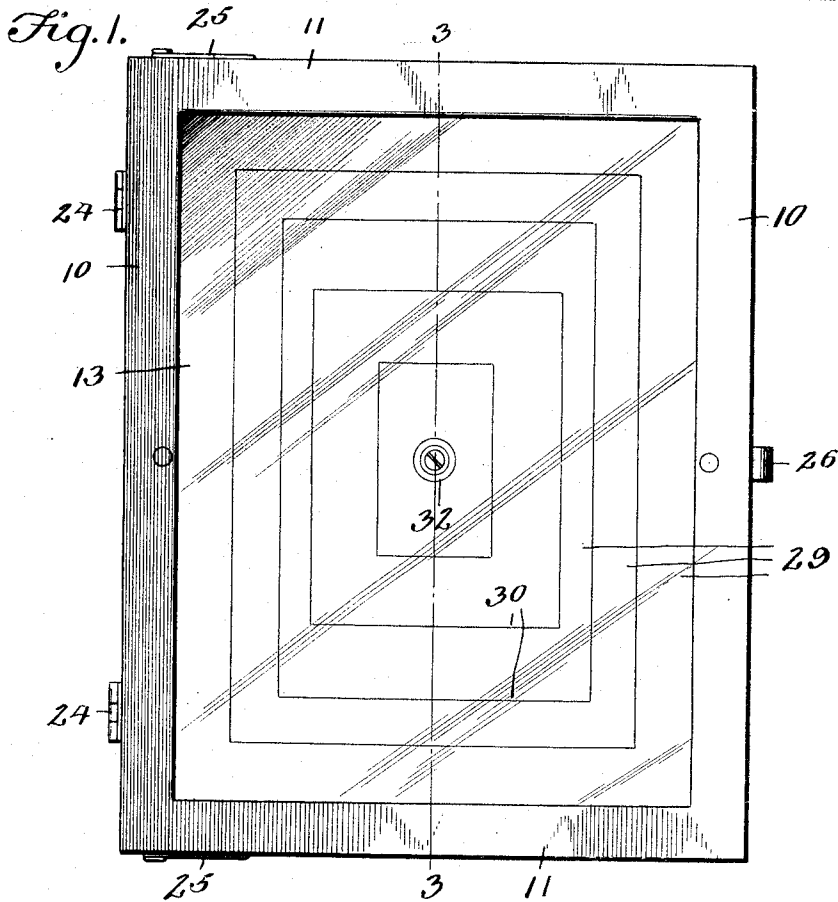


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 PHOTOGRAPHIC PRINTING FRAME.
 APPLICATION FILED AUG. 12, 1915.

1,193,584.

Patented Aug. 8, 1916.
 2 SHEETS—SHEET 1.



Witnesses

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PHOTOGRAPHIC-PRINTING FRAME.

1,193,584.

Specification of Letters Patent.

Patented Aug. 8, 1916.

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To all whom it may concern:

Be it known that I, CHARLES W. MARTIN, a citizen of the United States of America, residing at Fort Stanton, in the county of Lincoln and State of New Mexico, have invented certain new and useful Improvements in Photographic-Printing Frames, of which the following is a specification.

The invention relates to a printing frame and more particularly to the class of photographic printing frames, for making photographic prints from either glass or film negatives.

The primary object of the invention is the provision of a frame of this character, wherein the negative when placed therein is firmly held against slipping, although it may be adjusted to any desired position within the frame.

Another object of the invention is the provision of a frame of this character, wherein the sensitized paper used for the production of a print from a negative within the frame will, when placed within the frame, be automatically adjusted to the proper position relative to the negative, and when so adjusted will be positively held against slipping during the subsequent manipulation of the frame.

A further object of the invention is the provision of a frame of this character, wherein the construction thereof is novel in form, to accommodate various sizes of negatives and sensitized paper, the latter when within the frame being so masked that each finished print will have an even white border throughout its marginal edges, thereby presenting a neat and attractive appearance and rendering unnecessary any trimming of the said print.

A still further object of the invention is the provision of a frame of this character, wherein the opening thereof after the exposure of the sensitized paper will automatically lift the said paper so that it can be readily and quickly removed from the frame.

A still further object of the invention is the provision of a frame of this character,

which is simple in construction, thoroughly reliable and efficient in operation, strong, durable, light in weight, and inexpensive in manufacture.

With these and other objects in view the invention consists in the features of construction, combination and arrangement of elements, as will be hereinafter more fully described in detail, illustrated in the accompanying drawings, and pointed out in the claims hereunto appended.

In the accompanying drawings:—Figure 1, is a top plan view of a printing frame constructed in accordance with the invention. Fig. 2, is a bottom plan view. Fig. 3, is a vertical longitudinal sectional view on the line 3—3 of Fig. 1. Fig. 4, is a sectional view on line 4—4 of Fig. 2. Fig. 5, is an end edge elevation.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings in detail, the side strips 10, and the end strips 11, constitute the main body of the printing frame, these strips being suitably mortised together to form a unitary structure, while provided in the inner edges thereof are grooves or channels 12, serving as a seat or guideway for a glass panel 13, which is resiliently supported upon the free ends of outwardly bowed springs 14, located within the channels 12, in the side strips 11, and which are suitably fastened medially thereof, the frame at one end being provided with a slot 15, in the end strip 11, so as to permit the insertion of the glass panel 13, within the frame or its removal therefrom.

At the back of the main body of the printing frame and fitted within the same is an inner frame 16, which is connected to the body by means of a hinge 17, for free, swinging movement, and this frame 16, constitutes one of a series of nested mask frames 18, which gradually decrease in size relative to one another to snugly interfit and are disposed about a central filling block 19, which detachably fits within the innermost frame of the series; the said frames 18, be-

ing formed with correspondingly beveled edges 20, for the tight and snug fitting thereof one within the other.

The inner frame 16, is provided with a snap latch 21, which is adapted for locking engagement with a keeper pin 22, mounted in the main body of the printing frame, so as to hold the said frame 16, closed relative to said printing frame, yet releasable so that it may be opened for the placing of a negative within the main body upon the glass panel 13, when it is desired to make a print from the said negative.

The central filling block 19, is secured to a swinging skeleton back section 23, which is connected to the main body by means of hinges 24, while mounted in the end edges of the said section and the end strips 11, of the said main body are the respective ends of wire springs 25, which serve to automatically open the section relative to the body of the frame, after the said section 23, has been unlatched, the section being provided with a spring latch clip 26, which engages with a keeper lug 27, on the body of the printing frame for the locking of the said section closed.

On the outer sides of the respective frames 16, and 18, are pivoted turn latches 28, so that all of the frames can be detachably locked with each other.

Suitably fastened to the inner faces of the frames 16, and 18, are thin mats 29, which serve as rest flanges 30, at the inner edges of the said frames for supporting the sensitized papers when placed in any one of the same, and at the same time act to provide a border marginally of the paper during the printing process. Each frame 16 and 18, is provided in one end with a finger notch 31, for the convenient introduction of the sensitized paper therein or its removal therefrom. These notches 31, permit the easy nesting of the frames or their separation from one another.

Mounted centrally within the filling block 19, is a resilient suction cup 32, which automatically lifts the sensitized paper on the opening of the printing frame for the removal of the said paper therefrom after the printing of the same from the negative.

In the use of the printing frame the same is opened by unlatching the swinging section 23, after unlocking the inner frame 16, from the nested frames 18, and this frame 16, is then opened for the placing of the negative within the main body of the printing frame upon the glass panel 13, which is resiliently supported, so that on closing the inner frame 16, the said negative will be firmly held in position, although if it is desired to adjust the latter the operator need only press slightly from the rear of the main body upon the negative and the same can be moved to the proper position desired. Now, if a large

print is wanted the sensitized paper of the right size is placed within the frame 16, and thereafter the nested frames 18, with the section 23, which at this time carries the said frames 18, are brought to a closed position, so that the exposure can be made for the production of a print from the negative.

It will be clearly apparent that by the selection of any particular frame 18, for receiving a negative and sensitized paper different sizes of prints can be made within the frame, without possibility of the accidental slipping of either the paper or negative.

What is claimed is:—

1. A printing frame of the class described, comprising a main frame, a plurality of mask frames nested within the main frame, means for detachably locking the nested mask frames with each other, and a resiliently supported glass panel within the outer main frame.

2. A printing frame of the class described, comprising a main frame, a plurality of mask frames nested within the main frame, means for detachably locking the nested mask frames with each other, means for swingingly connecting the outermost mask frame to the main frame, and means for detachably locking the said outermost mask frame to the main frame.

3. A printing frame of the class described comprising a main frame, a glass panel within the same, means resiliently supporting the panel in said main frame, a plurality of mask frames nested within the main frame, means for detachably locking the mask frames to each other, a back section swingingly connected with the main frame, means for automatically opening the back section, a filling block on the back section and engageable in the innermost mask frame, means for locking the block with the innermost mask frame, and means for locking the back section to the main frame.

4. A printing frame, a plurality of nested mask frames removably held therein, a swinging back section carried by the printing frame, a filling block engageable in the innermost mask frame, means for detachably locking the block in said innermost frame, a suction element carried in the inner face of the block, means for detachably locking the nested mask frames to each other, and a mat carried on the inner face of each mask frame and providing an internal supporting flange for a negative and sensitized paper.

5. A printing frame, a plurality of nested mask frames removably held therein, a swinging back section carried by the printing frame, a filling block engageable in the innermost mask frame, means for detachably locking the block in said inner mask frame, a suction element carried by the inner mask frame, means for detachably lock-

ing the nested mask frames to each other, a mat carried on the inner face of each mask frame and providing an internal marginal supporting flange therein for a negative or sensitized paper, means for locking the back section closed, and means for automatically opening the said back section.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES W. MARTIN.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."