R. C. MAXWELL.

PRINTING FRAME.

APPLICATION FILED JULY 26, 1919.

1,324,203. Patented Dec. 9, 1919.

Fig. 1.

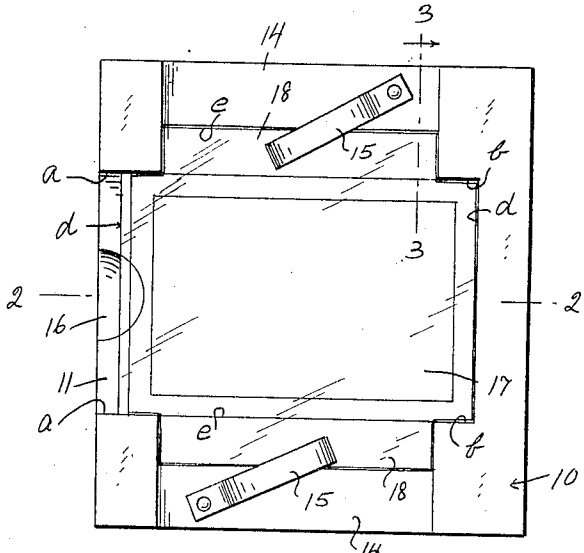


Fig. 5.

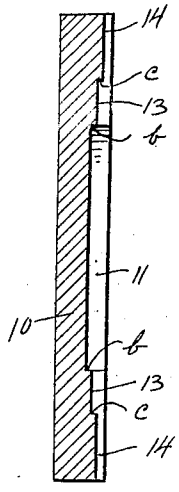


Fig. 2.

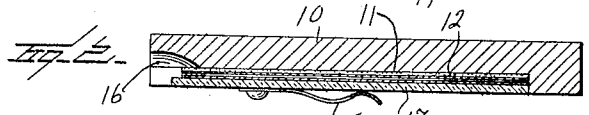


Fig. 3.

Fig. 4.

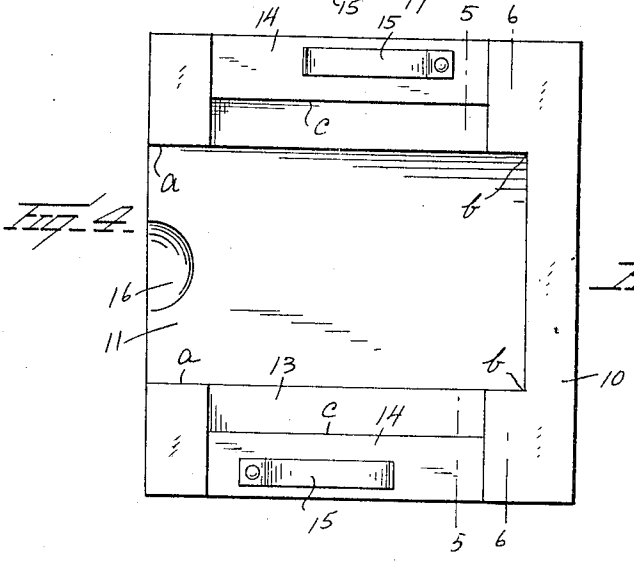
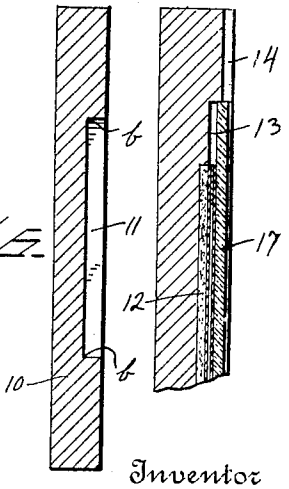


Fig. 6.



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PRINTING-FRAME.

1,324,203. Specification of Letters Patent. Patented Dec. 9, 1919.

Application filed July 26, 1919. Serial No. 313,549.

To all whom it may concern:

Be it known that I, RICHARD C. MAXWELL, a citizen of the United States, residing at Endicott, in the county of Broome and State of New York, have invented certain new and useful Improvements in Printing-Frames, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to photographic printing frames, and the general object of the invention is to provide a printing frame which is very simple in construction, which may be cheaply made, which is effective in use, and particularly in which the negative, printing paper, and mask may be disposed in the frame from the front thereof instead of from the back, thus doing away with the ordinary sectional back plate and the necessity of placing the negative, paper, etc., in from the back, and thus eliminating the difficulty usually found in placing the negative, the paper and the printing mask in proper register with each other.

A further object is to provide a device of this character having spring clamps upon its front for engaging the sheet of glass which is disposed over the negative, this glass being so formed that the clamps will not extend over the negative or paper when in use.

Another object is to so form the frame that the negative, mask and printing paper may be readily alined or registered within the frame, and whereby these parts may be readily removed.

My invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a face view of a photograph printing frame constructed in accordance with my invention;

Fig. 2 is a section on the line 2—2 of Fig. 1;

Fig. 3 is a section on the line 3—3 of Fig. 1;

Fig. 4 is a plan view of the construction shown in Fig. 1 but with the negative, printing paper and the mask removed;

Fig. 5 is a section on the line 5—5 of Fig. 4;

Fig. 6 is a section on the line 6—6 of Fig. 4.

Referring to these drawings, it will be seen that my printing frame consists of a rectangular block of wood, rubber, composition, or any other suitable material, designated 10, the back of which is flat, but the front of which is recessed, as at 11, on the lines *a*—*a* from one side edge of the block forming the frame to the points *b*. In this recess there is disposed a strip of textile fabric, such as felt, designated 12. Outward of the walls *a*—*a* of this central recess, the face of the block is depressed or recessed, as at 13. These recesses 13 are less in depth than the recess 11 so that there is a slight shoulder formed on the lines *a*—*a* and a relatively deep shoulder on the lines connecting the corners of the recess 11 at *b*—*b*. Outward of the recess 13, the face of the plate or block is also slightly recessed, as at 14, this recess being as long as the recess 13 but being shallower than this recess so that a shoulder is formed on the line *c*.

It will be seen that this recessing of the face of the block provides a relatively deep recess running transversely of the block, that the recesses 13 form extensions of this central recess 11, and that the faces of the portions 14, while disposed above the level of the face of the recessed portion 13, are depressed below the general level of the block. On these parts 14 there are pivoted the spring clips 15 which are adapted to be swung into or out of operative position. The margin of the block is cut away, as at 16, to accommodate the finger in removing the glass, negative, mask, and paper. The glass used with this printing frame is approximately cruciform and is designated 17. It has a length from *d* to *d* nearly equal to the length of the recess 11, and a height from *e* to *e* equal to the distance from *c* to *c* on the block or frame.

In the use of this device, the printing paper is laid upon the felt mat 12 with its corners disposed against the shoulders *b* and its opposite corners disposed between the shoulders *a*, and then the usual mask is laid on the paper. The negative is then disposed over the mask and the glass plate 17 disposed over the negative. The glass plate being cruciform will fit between the shoulders *b* and between the shoulders forming the terminations of the recesses 13 so that the glass plate will be held from any movement in any direction. The spring clips 15 are then shifted over the portions 18 of the glass plate, thus holding the plate, the negative, the mask, and the printing paper in proper position for printing.

It will be seen that the spring clips 15 are

not turned over the negative and paper, but engage those portions 18 of the glass which project above and below the negative and paper. I have found in practice that these spring clips will exert full pressure upon the negative, glass and paper so as to hold them in intimate conjunction. At the same time, they may be readily thrown back and the paper, glass, negative and mask readily removed by inserting the finger beneath the several elements by means of the recess 16.

While I have illustrated a printing frame which is adapted for certain sizes of picture and having certain forms, yet it will be understood that the shape of the printing frame may be varied in many ways and, of course, the printing frame may be made in various sizes. I do not wish to be limited to any particular manner of constructing the frame, as it may be made up of wood lamina or cut out of a solid piece of wood. It will be seen that the block 10 constitutes the back of the frame and this block is recessed to form a seat 11 for the photographic paper, negative, etc., and that this recess is extended at a plurality of points, as at 13, and made shallower to form a seat for the projecting portions 18 of the sheet of glass 17.

I claim:—

1. A printing frame comprising a back recessed upon its upper face to provide a seat for a sheet of photographic paper and a negative, and also recessed to provide relatively shallow recesses forming extensions of the first named recess, and a transparent sheet formed to extend entirely over the first named recess and project beyond it, said projecting portions seating in the relatively shallow recesses, and means mounted on the back and engageable with the sheet of transparent material to hold it in place.

2. A printing frame comprising a back recessed upon its face to provide a seat for photographic paper and a negative, said recess extending inward from one edge of the back but terminating short of the other edge, said face having a plurality of relatively shallow recesses forming extensions of the first named recess, and a transparent sheet formed to extend over the first named recess and having portions projecting therefrom and seating in the relatively shallow recesses, and shiftable clamping clips mounted upon the face of the back and adapted to be disposed over the projecting portions of the transparent sheet.

3. A printing frame comprising a back having a recess extending from one edge across the face of the back and nearly to the other edge thereof, said face having two laterally disposed recesses forming extensions of the main recess but being relatively shallow, and a transparent sheet cruciform in plan whereby the body portion of the sheet may extend over the first named recess and the projecting portions of the sheet may be disposed in said relatively shallow recesses, and springs pivoted to the face of the back and adapted to be swung into or out of engagement over the projecting portions of the transparent sheet.

4. A printing frame comprising a back having a recess extending from one edge across the face of the back and nearly to the other edge thereof, said face having two laterally disposed recesses forming extensions of the main recess but being relatively shallow, and a transparent sheet cruciform in plan whereby the body portion of the sheet may extend over the first named recess and the projecting portions of the sheet may be disposed in said relatively shallow recesses, and springs pivoted to the face of the back and adapted to be swung into or out of engagement over the projecting portions of the transparent sheet, one margin of the back upon which the first named recess opens being cut away to provide for the detachment of the transparent sheet from the back.

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

RICHARD C. MAXWELL.

Witnesses:

JOSIE REISCHAUER,

D. J. REISCHAUER.