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H. W. HERRMAN & C. J. EVERETT.

PHOTOGRAPHIC PRINTING FRAME.

APPLICATION FILED NOV. 14, 1902.

NO MODEL.

Fig. 1.

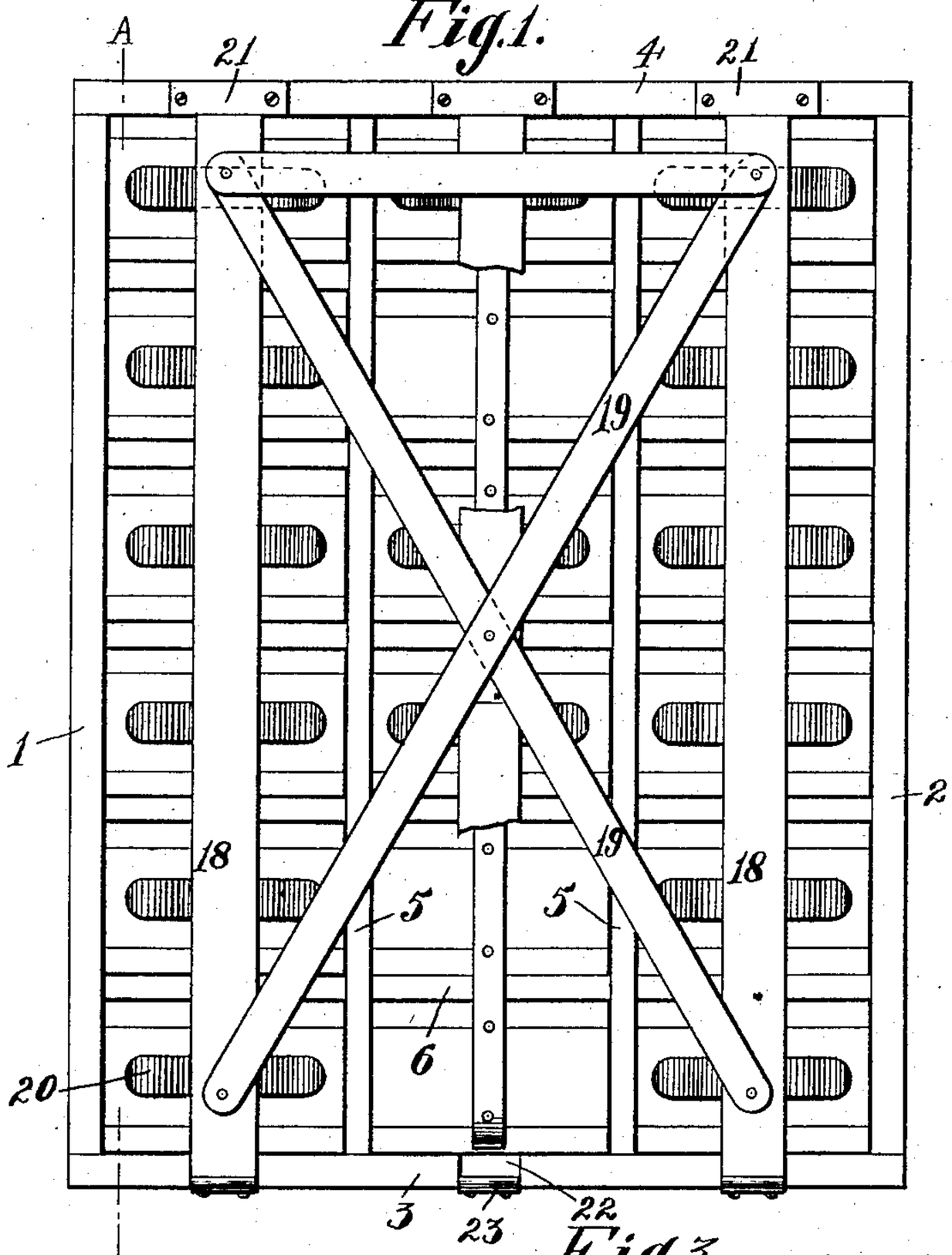


Fig. 2.

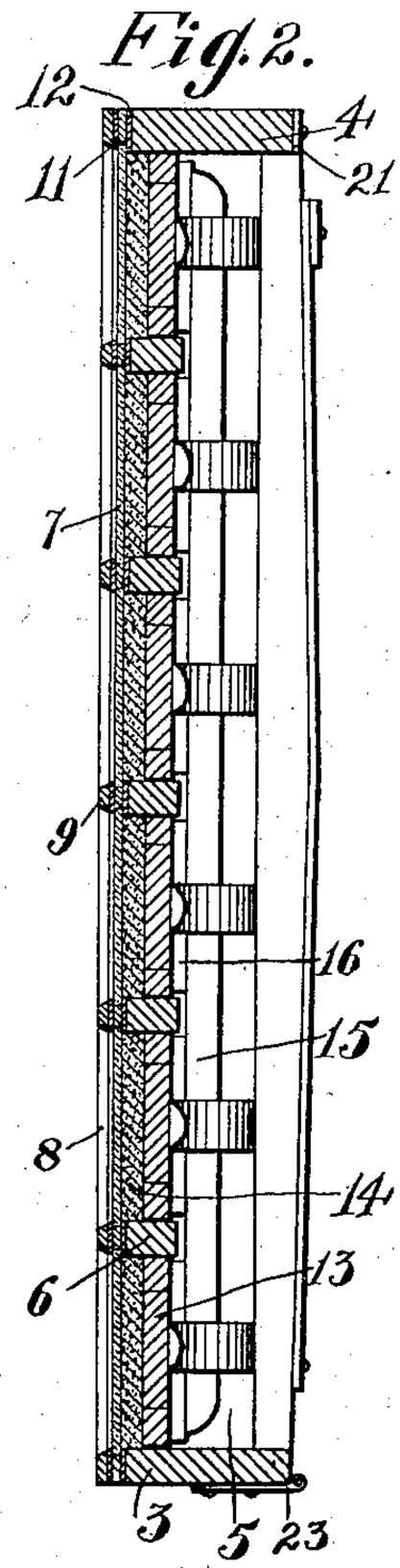


Fig. 3.

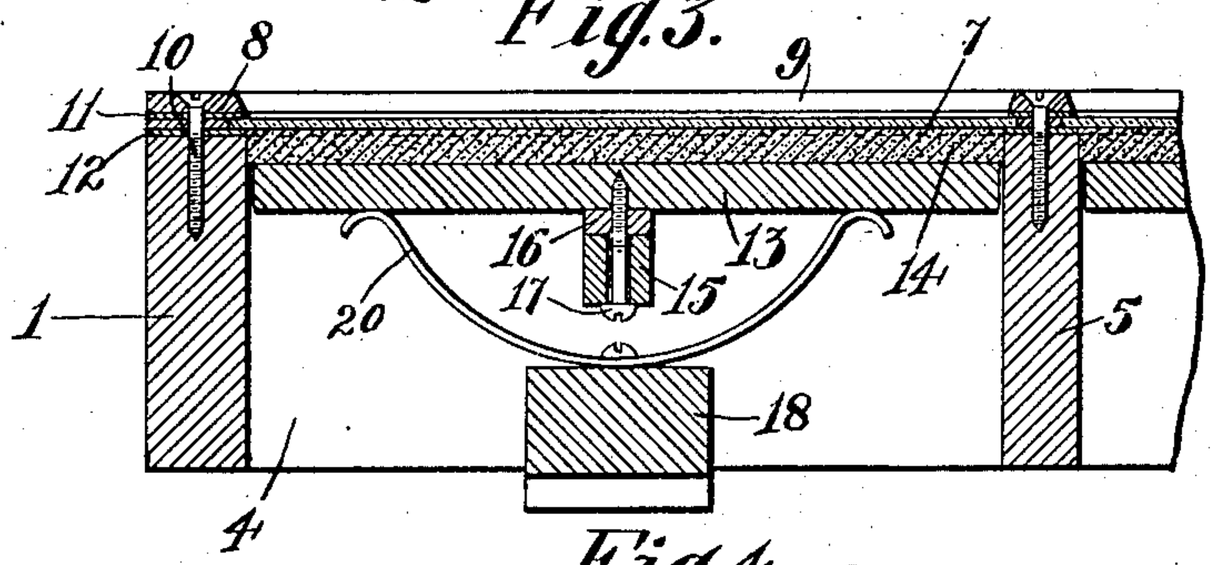
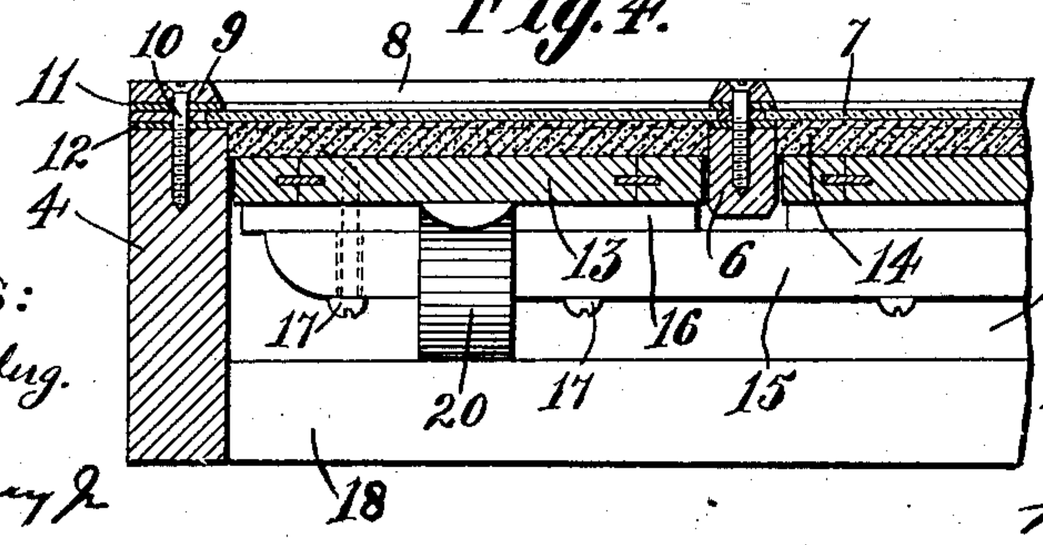


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY W. HERRMAN AND CHARLES J. EVERETT, OF NEW YORK, N. Y.

PHOTOGRAPHIC-PRINTING FRAME.

SPECIFICATION forming part of Letters Patent No. 721,370, dated February 24, 1903.

Application filed November 14, 1902. Serial No. 131,290. (No model.)

To all whom it may concern:

Be it known that we, HENRY W. HERRMAN and CHARLES J. EVERETT, citizens of the United States, and residents of the borough of Manhattan, in the city and State of New York, have invented a new and useful Improvement in Photographic-Printing Frames, of which the following is a specification.

This invention relates to an improvement in photographic-printing frames; and it has for its object to provide a frame having a plurality of separate compartments for receiving a plurality of cards or sheets to be printed, the glass front of the frame being formed on a plurality of panes, one for each compartment, whereby the frame may be brought into close proximity to artificial light of great intensity and the resulting heat therefrom without the liability to break the glass front, as has heretofore been common.

A practical embodiment of this invention is represented in the accompanying drawings, in which—

Figure 1 is a back view of the frame, a portion of the presser-frame being broken away to more clearly illustrate the method of attaching the presser-clips. Fig. 2 is a transverse section from front to rear in the plane of the line A A of Fig. 1. Fig. 3 is an enlarged section through a portion of the frame, taken in one plane; and Fig. 4 is an enlarged section through a portion of the frame, taken in a plane at right angles to Fig. 3.

The printing-frame as a whole comprises a main frame and a presser-frame arranged to be removably engaged therewith. The main frame comprises a box-like structure consisting of side walls 1 and 2, connected by end walls 3 and 4, intermediate longitudinal partitions 5, cross-partitions 6, and a glass front composed of a plurality of panes of glass or other transparent material 7. The partitions 5 and 6 serve to divide the interior of the main frame into a plurality of compartments, which compartments may be made of the size required for the particular purpose to which the printing-frame is to be used. Each compartment is provided with a separate pane of glass 7, all of which panes are secured to the front of the main frame by means of longitudinal and lateral battens 8 and 9, and fastening-screws 10 passing through the said battens into engagement with the partitions and the side and end walls of the said main frame. These glass panes may be packed by strips of suitable yielding material 11 and 12, overlapping the edges of each one of the panes and clamped in position by the battens above referred to.

Each series of compartments running longitudinally or transversely—in the present instance longitudinally—are provided with a series of connected back boards 13, each of which boards is provided with a thick front 14, of some suitable yielding material—such, for instance, as felt—between which front 14 and the pane 7 the sheet of sensitive material and the sheet to be printed are placed. Each series of back boards 13 are connected by a bar 15, which is spaced from the back boards in each compartment by a block 16, so as to permit the bar 15 to clear the partitions 6. The bars 15 are secured to each of the back boards 13 by one or more screws 17—in the present instance two are shown—which screws have a slight play in the bar 15, so as to permit the back board 13 to adjust itself with respect to the glass pane 7 when held in position within the compartment.

The presser-frame is constructed as follows: A plurality of series of bars 18, one for each connected series of back boards 13, are provided, which bars are rigidly spaced apart by means of cross-braces 19. The bars 18 are provided with presser-springs 20, one for each back board 13, which springs 20 are secured intermediate their ends to the inner faces of the bars 15, the ends of the springs pressing against the back or exterior faces of the back boards 13 upon the opposite sides of their connecting-bars 15 when the presser-frame is secured in position within the main frame. This presser-frame is removably secured to the back of the main frame by providing one end wall—for instance, the wall 4—with a series of retaining-plates 21 for receiving corresponding ends of the bars 18, and providing the other end wall—for instance, the end wall 3 of the main frame—with a plurality of sockets 22 and spring-catches 23 for removably engaging the opposite corresponding ends of the bars 18.

By the construction of a printing-frame as hereinbefore described we are enabled to

provide a frame which is capable of being placed in close proximity to an artificial light of great intensity without the danger of breaking the glass front. Furthermore, the partitions 5 and 6 serve to strengthen the printing-frame and also absolutely prevent the warping of the frame when subjected to the high heat necessary where the printing is done by artificial light of great intensity.

By removing the presser-frame from the main frame the connected back boards of one series may be removed without removing the back boards of the remaining series within the frame. Another great advantage which is obtained by providing the frame with a plurality of separate compartments lies in the fact that a large number of cards may be rapidly placed in position within the frame and accurately placed apart, which is not possible where a frame having a single compartment has been heretofore used.

What we claim is—

1. A printing-frame comprising a main frame having a series of compartments therein for receiving and spacing apart a plurality of sheets to be printed, a series of connected back boards for the said series of compartments and a presser-frame for the back boards.

2. A printing-frame comprising a main frame having compartments therein arranged in different series, a series of connected back boards for each series of compartments and a presser-frame common to all of the back boards.

3. A printing-frame comprising a main frame having a series of compartments therein, a series of back boards for the said compartments, a bar secured to the several back boards and a separate presser-frame for the back boards.

4. A printing-frame comprising a main frame having a series of compartments therein, a series of back boards for said compartments, a common connecting-bar for the several back boards and spacing-blocks interposed between the back boards and the connecting-bar and a separate presser-frame for the back boards.

5. A printing-frame comprising a main frame having a series of compartments therein, a series of back boards for said compartments and a common bar for the several back boards loosely connected thereto and a separate presser-frame for the said back boards.

In testimony that we claim the foregoing as our invention we have signed our names, in presence of two witnesses, this 10th day of November, 1902.

HENRY W. HERRMAN.
CHARLES J. EVERETT.

Witnesses:
C. S. SUNDGREN,
FREDK. HAYNES.