

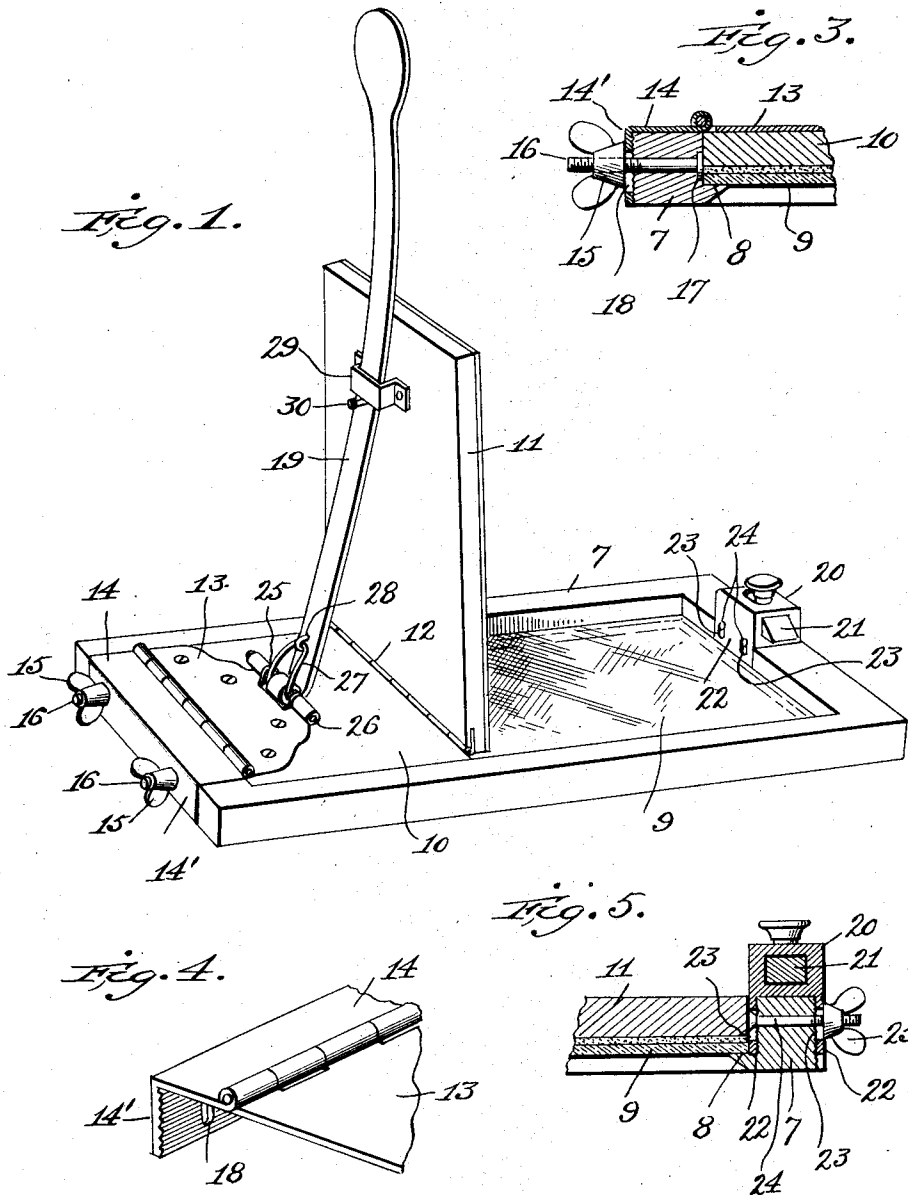
G. VINNEMEIER.
PRINTING FRAME.

APPLICATION FILED APR. 17, 1912.

1,044,107.

Patented Nov. 12, 1912.

2 SHEETS—SHEET 1.



Witnesses

Lucy B. Hilke
J. M. Carphauser

Inventor

Gerhard Vinnemeier

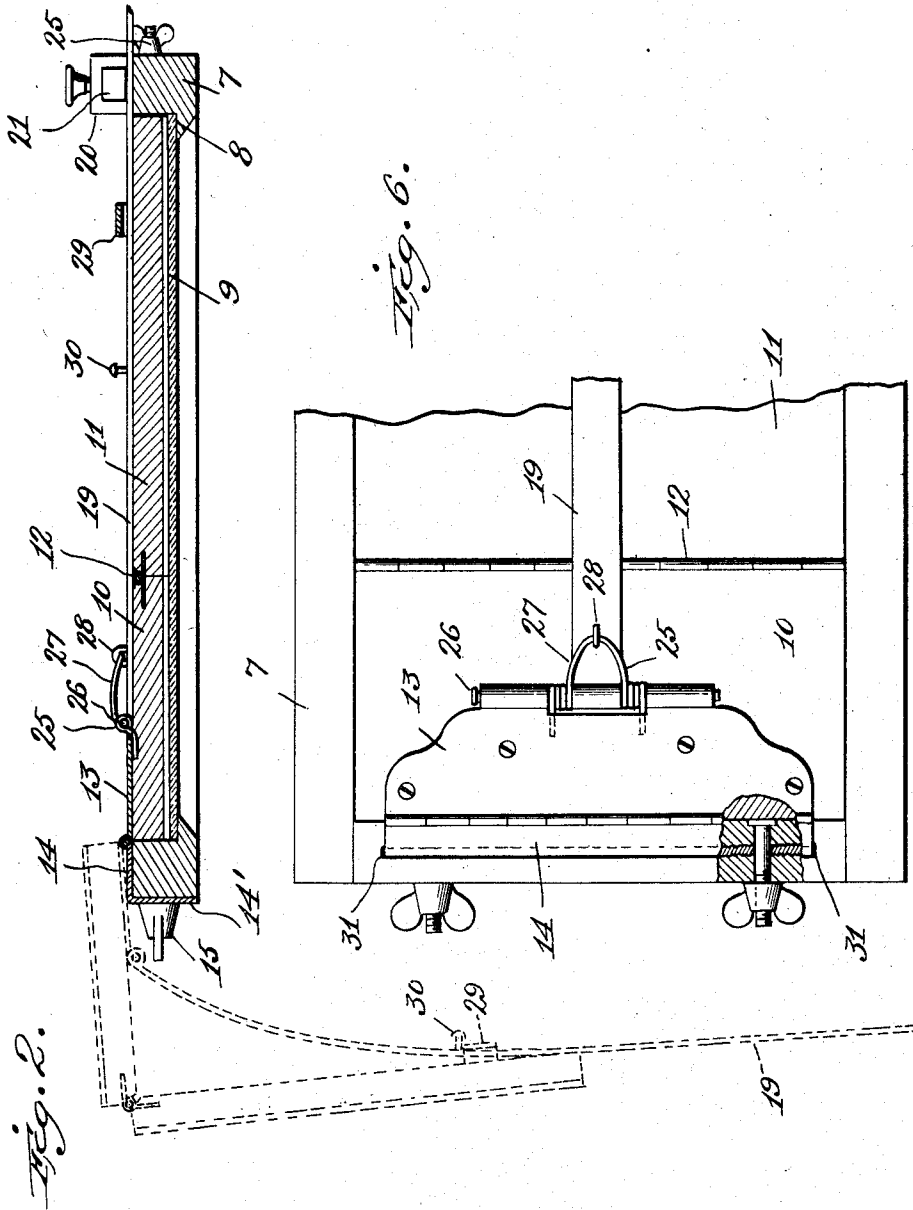
By *Edwin L. Jewell*
his Attorney

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Witnesses

Percy B. Hills
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UNITED STATES PATENT OFFICE.

GERHARD VINNEMEIER, OF CLAREMORE, OKLAHOMA.

PRINTING-FRAME.

1,044,107.

Specification of Letters Patent.

Patented Nov. 12, 1912.

Application filed April 17, 1912. Serial No. 691,369.

To all whom it may concern:

Be it known that I, GERHARD VINNEMEIER, born in Germany, but been a resident of the United States since 1886, residing at Claremore, in the county of Rogers and State of Oklahoma, have invented certain new and useful Improvements in Printing-Frames, of which the following is a specification.

This invention relates to improvements in photographic printing frames and has for its particular object to provide a device of that character wherein the back can be opened with one hand, allowing the free use of the other hand to manipulate the prints and print paper.

Another important object is to provide a back having two parts hinged together, one of said parts being adjustably clamped to the frame and means thereon for throwing open the other part when its fastening is released.

These and other objects hereinafter set forth and claimed are attained by the means illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved device showing a portion of the back opened. Fig. 2 is a longitudinal section showing the back closed in full lines and entirely open in dotted lines. Fig. 3 is a detail section of the rear edge of the frame showing the clamping means for the main hinge. Fig. 4 is a detail perspective view of a portion of the main hinge. Fig. 5 is a detail section through the front edge of the frame showing the clamping means for the spring lock, and Fig. 6 is a modified form of securing the main hinge in position.

Like reference numerals in all of the figures of the drawings designate similar parts.

The rectangular frame 7 is constructed in the usual manner having the seat 8 for the glass 9 upon which the negative and print are supported. A back having two parts 10 and 11 and connected together with a hinge 12, is provided with means for clamping the negative and print upon the glass, and said back is adjustably clamped or secured to the frame 7 to allow of its vertical adjustment to accommodate different thicknesses of material between it and said glass.

The means for connecting the back to the frame comprises a main hinge having leaves 13 and 14, the leaf 13 being secured to the back in any suitable manner and the leaf

14 being bent over the rear edge of the frame as at 14' and clamped thereto by suitable nuts 15, which engage threaded bolts 16 provided with heads 17, and positioned through the rear side of the frame. The downwardly bent portion 14' of the leaf 14 is provided with elongated slots 18 through which the ends of the bolts 16 pass, as shown clearly in Fig. 3.

For clamping the back upon the glass, a spring lever 19 is pivoted to the front edge of the leaf 13, and to lock said lever and back against the glass, a spring lock 20 is fastened to the front side of the frame with its beveled nose 21 in the path of movement of one edge of said spring lever 19. Thus when the lever is depressed it engages the nose 21, forcing it backward within its casing, and whence it springs out over the lever when the same has reached its lowermost position. Said lock is also adjustably secured to the frame, whereby it may be adjusted vertically to accommodate different thicknesses of material, the same as the hinge member before described. This is accomplished by providing the casing of the lock with depending flanges 22 which engage the inner and outer surfaces of the front member of the frame. These flanges 22 are provided with slots 23, through which extends the bolts 24, each having a head on one end and threads at the other end with which engages a nut 25.

The spring lever 19 is bowed sufficiently to exert a yielding pressure upon the back when it is depressed or straightened, and to automatically lift the free end of said spring lever and the front part of the back, a spring 25 having its end portions coiled around the pintle 26, upon which the lever 19 is pivoted, the ends being secured under the edge of the leaf 13, as shown in Fig. 2, and the loop 27 thereof engaging an eye 28 secured to said lever. Thus when the lever is depressed the spring 25 is placed under tension, and when the lock holding the lever down is released, said spring 25 throws the lever upward and also back, through the coöperation of the loop 29 fastened adjacent to the front edge of the back, and through which loop the spring lever passes.

To prevent the front part of the back from being thrown too far backward when the rear part is positively held by the hand, and to throw both parts open, when the lock is disengaged, a pin or stop 30 is secured

upon the spring lever, between the loop 29 and the spring 25, said stop adapted to engage said loop 29 when the front part of the back reaches approximately a vertical position, as shown in Fig. 1. Thus if the rear part of the back is held in position and the lock released the front part will assume the above mentioned position, but if the lock is released without holding the rear part of the back, the impetus of the spring lever and the engagement of its stop 30 and the loop 29 will lift the rear part of the back and throw both parts to the dotted line position shown in Fig. 2. The back is provided with the usual padding and the engaging surfaces of the clamped parts are roughened to prevent slipping.

In the modification shown in Fig. 6, the rear side of the frame is slotted, as at 31, and the bent edge of the hinge is inserted in said slot and clamped therein by bolts and nuts.

In operation, when it is desired to inspect a print without moving it, the rear part of the back is held with one hand and the latch released with the other, thereby allowing only the front part of the back to be opened automatically, but if it is desired to remove the print, the latch is released without holding the rear part of the back and the entire back is automatically thrown open.

The above described construction pro-

vides a simple and inexpensive device and is adapted for rapid and easy manipulation.

Having thus fully described the invention what I claim is:

1. A device of the character described, comprising a frame, a glass supported thereby, a divided back hinged to said frame, a spring lever pivoted upon said back for pressing it upon said glass, a lock on the frame adapted to engage said spring lever, and a spring for lifting said lever.

2. A device of the character described, comprising a frame, a glass supported thereby, a back hinged to said frame having a front and a rear part, a spring lever pivoted to said rear part and extending over said front part, a loop on said front part through which said lever passes, a stop on said lever for engaging said loop, and a spring for lifting said lever.

3. A device of the character described, comprising a frame, a glass supported thereby, a back hinged to and vertically adjustable upon said frame, means for lifting said back, and a vertically adjustable lock for engaging said lifting means.

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

GERHARD VINNEMEIER.

Witnesses:

JOHN T. EZZARD,
R. L. FARRAR.