

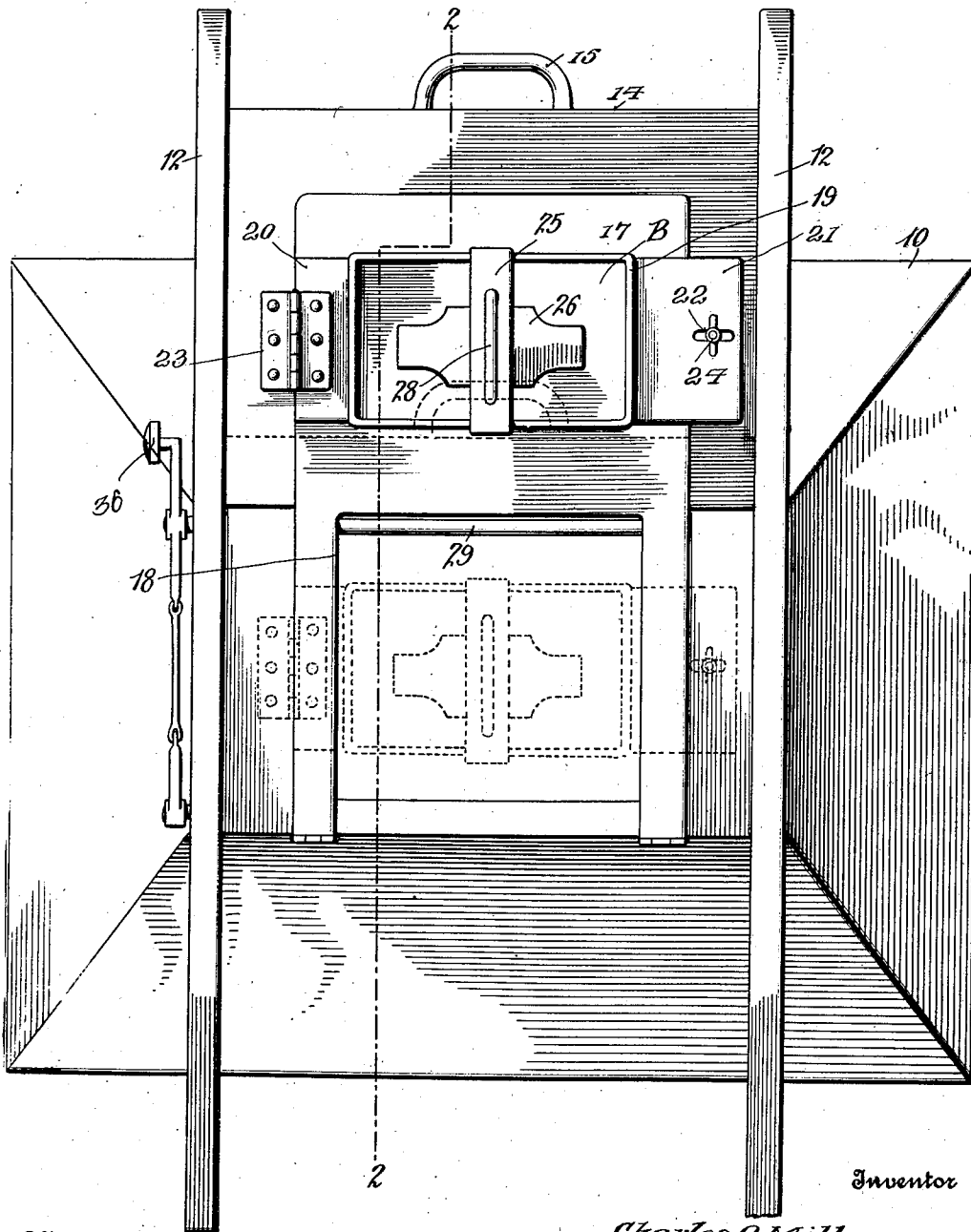
C. O. MILLER.
 PHOTOGRAPHIC PRINTING DEVICE.
 APPLICATION FILED JULY 2, 1910.

1,004,670.

Patented Oct. 3, 1911.

3 SHEETS—SHEET 1.

FIG. 1.



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Witnesses

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By

[Signature]

Attorneys

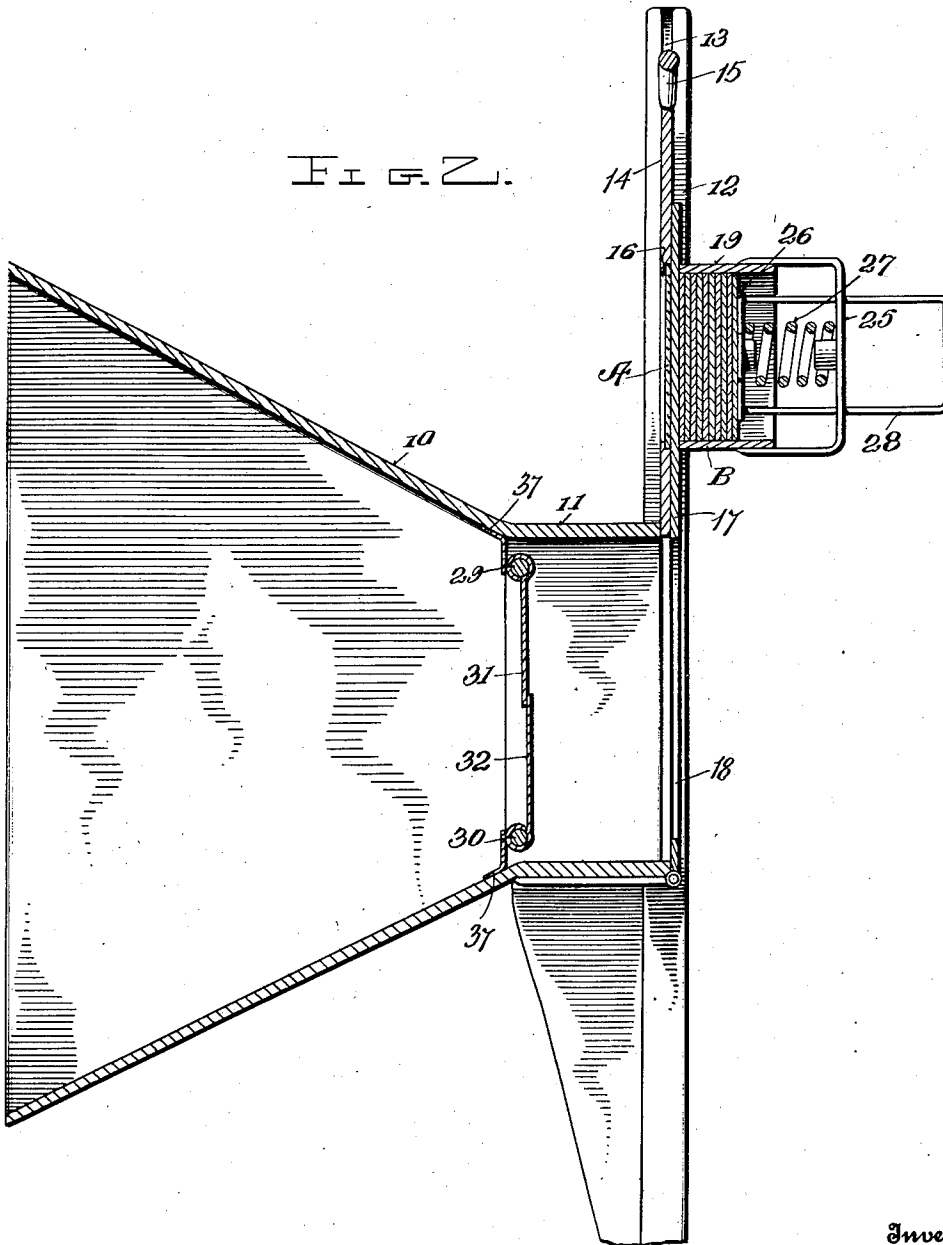
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FIG. 2.



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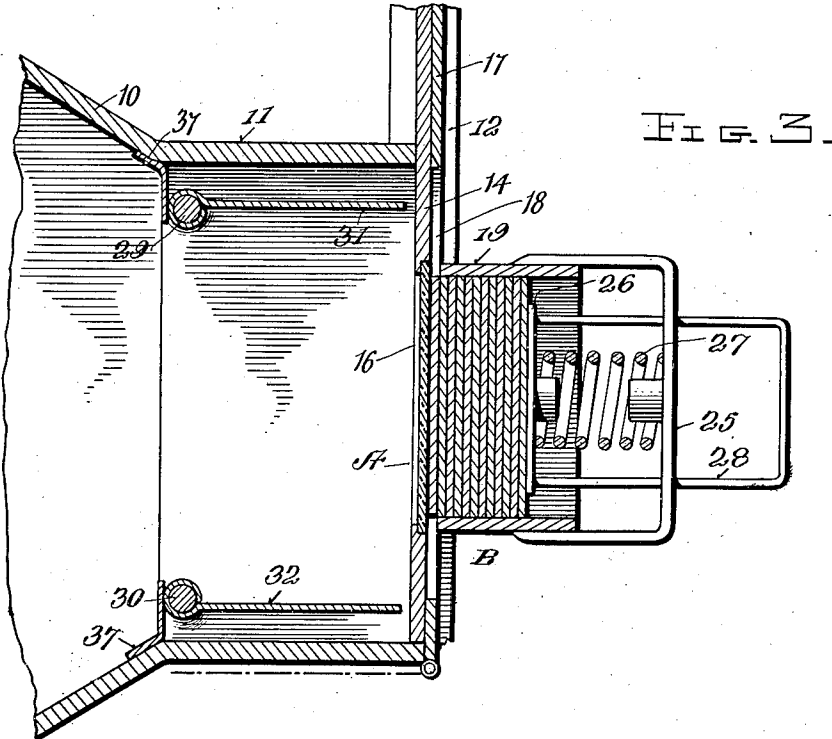


FIG. 3.

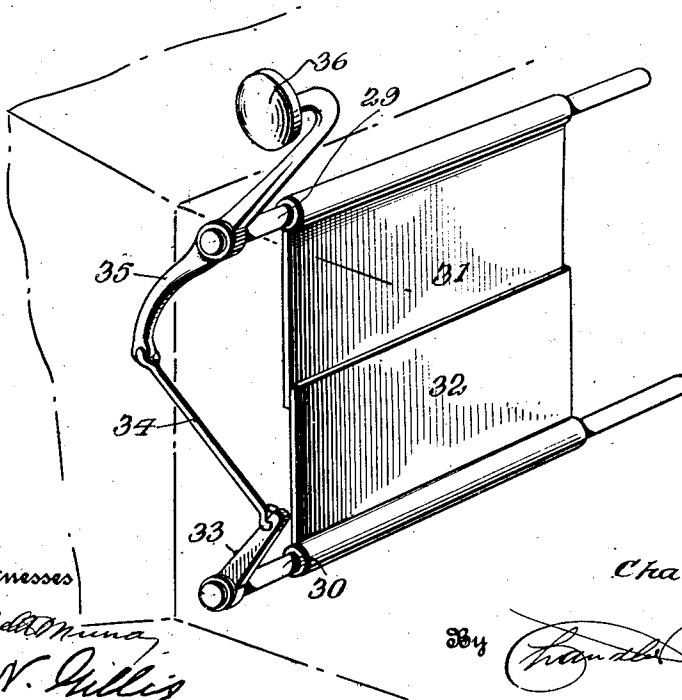


FIG. 4.

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UNITED STATES PATENT OFFICE.

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PHOTOGRAPHIC-PRINTING DEVICE.

1,004,670.

Specification of Letters Patent.

Patented Oct. 3, 1911.

Application filed July 2, 1910. Serial No. 570,129.

To all whom it may concern:

Be it known that I, CHARLES O. MILLER, a citizen of the United States, residing at Arena, in the county of Delaware, State of New York, have invented certain new and useful Improvements in Photographic-Printing Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to photography and has special reference to a device for printing positives from a negative.

One object of the invention is to provide means whereby a succession of sensitized blanks may be exposed behind a negative, the blanks being held in a magazine.

Another object of the invention is to provide mechanism for the removal of the exposed positive after such exposure.

With the above and other objects in view, the invention consists in general of a magazine arranged to contain a pack of blanks such as post cards or the like and other mechanism whereby said blanks may be successively exposed behind a negative, the blanks being released after exposure.

The invention further consists in certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings, and specifically set forth in the claims.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and:—Figure 1 is a rear elevation of a device constructed in accordance with this invention, the magazine being shown in unexposed position in full lines and in position for exposure in dotted lines. Fig. 2 is a section on the line 2—2 of Fig. 1, the shutters being closed. Fig. 3 is an enlarged detail section on the same line as Fig. 2, the magazine being shown in position for exposure and the shutters open. Fig. 4 is a detail perspective of the mechanism controlling the shutters.

This invention comprises a casing consisting of frusto-pyramidal portion 10 open at both bases and having a prismatic portion 11 forming a continuation of the smaller end of the frustum. This prismatic portion is

also open at both ends and on the rear end of this portion are fixed guides 12, the guides being preferably disposed vertically at each side of the portion 11. These guides are provided with grooves 13 and slidably mounted in the grooves 13 is a slide 14 having a handle 15 at the upper end thereof. This slide 14 is provided with an opening 16 having rabbeted edges for the reception of a negative, here indicated at A. Immediately in rear of the slide 14 is a plate 17. This plate is hinged at its lower end to the under side of the casing portion 11 and is provided with an exposure opening 18. Furthermore, this plate is made of metal of such thickness as to exactly correspond with the thickness of the blank which is to be exposed. For instance, if post cards are to be exposed the plate is made of the thickness of a post card and it is to be here noted that the device is especially adapted for the exposure of said post cards, although it may be utilized for the exposure of other blanks.

The magazine for this invention comprises a rectangular casing 19 having flanged ends 20 and 21, the latter being provided with a slot 22. The end 20 is secured to one side of the slide 14 by means of a suitable hinge 23 while at the other side of the magazine there is provided a turn button 24 which is fixed to the slide 14 and is adapted, when properly positioned, to pass through the slot 22. When passed through said slot the turn button may be positioned across the slot as indicated in Fig. 1 and serves to hold the magazine in position across the plate 17.

The magazine is provided with a strap 25 which extends from one side to the other across the rear portion of the magazine, the strap being of U-shape and the legs being secured to the top and bottom sides of said magazine. Within the magazine is a follower plate 26 which is normally urged to the front of the magazine by a compression spring 27 one end of which rests against the follower plate while the other end rests against the bight of the strap 25. At 28 is shown a handle member which is of U-shape. The legs of this handle member pass through suitable openings in the bight of the strap 25 and the extremities of these legs are secured to the plate 26 so that by pulling upon the

handle 28 the follower plate 26 may be drawn toward the rear portion of the magazine. Within this magazine are carried the sensitized blanks which are here indicated at B.

Extending from side to side of the casing 11 and adjacent the top and bottom of said casing are rods 29 and 30. Fixed to these rods 29 and 30 are shutter leaves 31 and 32 respectively and the edges of these shutter leaves are intended to overlap each other so that when the parts are in the position shown in Fig. 2 the entry of light from the major base of the frustum 10 to the casing 11 will be prevented. On the rod 30 exterior of said casing is a rock arm 33 which is connected by a link 34 to a rock lever 35 fixed upon the rod 29 and provided with an operating handle 36. In order to guard the edges of the shutters there are also provided light guards 37 as clearly seen in Figs. 2 and 3.

In the operation of the device a negative is positioned in the opening 16 and against the rabbeted edges thereof. The magazine is swung open by moving the turn button 24 so that the slot 22 will pass free therefrom. The follower plate 26 is then drawn back by the handle 28 and the package of sensitized blanks placed in the magazine. The latter is then closed and the handle 28 released. When the magazine is closed the parts should be in the position shown in Fig. 2, that is to say, in such position that the foremost blank will rest against the plate 17. The shutters are then closed by moving the handle 34 in the proper direction and the handle 15 grasped and the slide and the magazine pushed down until the magazine registers with the exposure opening 18. When this takes place the spring 27 forces the foremost blank out of the magazine against the negative. The shutters are then opened and after sufficient exposure has been given the blank, are again closed. The handle 15 is again grasped and the slide drawn up. The blank which has been pushed into the exposure opening will be drawn up a short distance between the magazine and the negative until its upper edge comes in contact with the upper edge of the exposure opening. Further movement of the slide upward carries with it the remainder of the blanks and the negative while the positive thus made is held from upward movement by the plate 17. This operation is repeated until all the blanks in the magazine have been exposed when a new set may be substituted.

There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

Having thus described the invention, what is claimed as new, is:—

1. In a device of the kind described, a

plate having an exposure opening, a magazine for sensitized blanks slidable over and away from said opening on one side of said plate, a negative holder slidable on the opposite side of said plate, and means to force said blanks from the magazine into the opening and against a negative in said holder.

2. In a device of the kind described, spaced guides, a slide movable along said guides and provided with an opening for the reception of a negative, a plate having an exposure opening and positioned between said guides and in rear of said slide, a magazine for sensitized blanks extending over said plate and attached to said slide to move therewith, and means to force a blank from said magazine into said exposure opening when the magazine is moved to register with said plate opening.

3. In a device of the kind described, spaced guides, a slide movable along said guides and provided with an opening for the reception of a negative, a plate having an exposure opening and positioned between said guides and in rear of said slide, a magazine for sensitized blanks extending over said plate in the rear thereof, a hinge connection between one end of said magazine and slide, a releasable latch for holding the other end of said magazine to the slide, and a spring pressed follower plate in said magazine to force a blank from said magazine into said exposure opening when the magazine is moved to register with said plate opening.

4. In a device of the kind described, a plate having an exposure opening, a magazine for sensitized blanks slidable over and away from said opening on one side of said plate, a negative holder slidable on the opposite side of said plate, means to force said blanks from the magazine and into the opening against a negative in said holder, and a shutter in front of said exposure opening.

5. In a device of the kind described, spaced guides, a slide movable along said guides and provided with an opening for the reception of a negative, a plate having an exposure opening and positioned between said guides and in the rear of said slide, a magazine for sensitized blanks extending over said plate and attached to said slide to move therewith, means to force a blank from said magazine into said exposure opening when the magazine is moved to register with said plate opening, and a shutter in front of said exposure opening.

6. In a device of the kind described, spaced guides, a slide movable along said guides and provided with an opening for the reception of a negative, a plate having an exposure opening and positioned between said guides and in the rear of said slide, a magazine for sensitized blanks extending

over said plate in the rear thereof, a hinge
connection between one end of said maga-
zine and slide, a releasable latch for hold-
ing the other end of said magazine to the
5 slide, a spring pressed follower plate in said
magazine to force a blank from said maga-
zine into said exposure opening when the
magazine is moved to register with said

plate opening, and a shutter in front of said
exposure opening.

In testimony whereof, I affix my signa-
ture, in presence of two witnesses.

CHARLES O. MILLER.

Witnesses:

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FRED B. RACE.

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