(No Model.)

J. THORPE.

PHOTOGRAPHIC PLATE HOLDER.

No. 412,682. Patented Oct. 8, 1889.

Fig. 1.

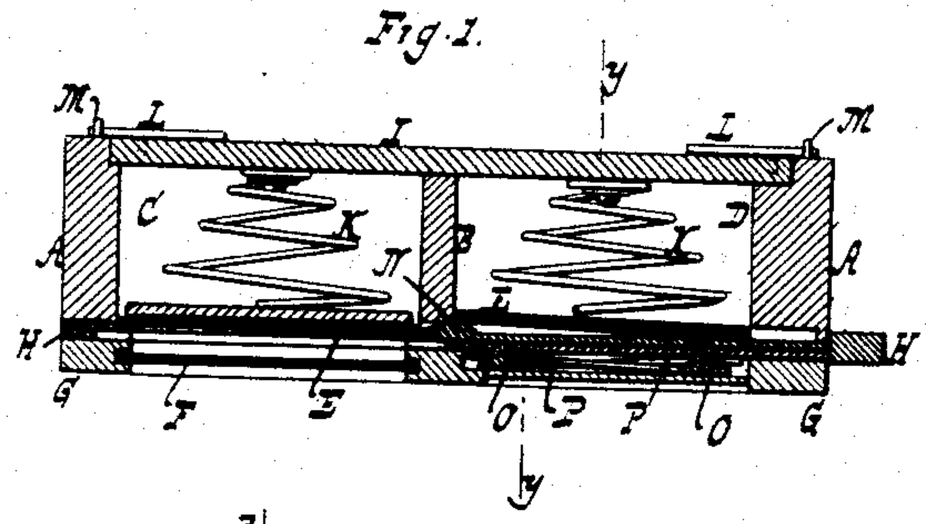


Fig. 2.

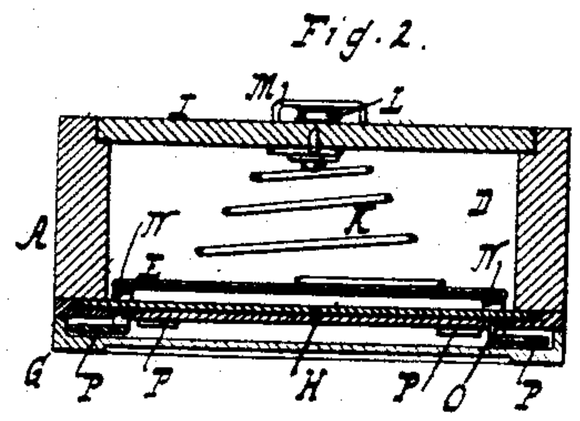


Fig. 3.

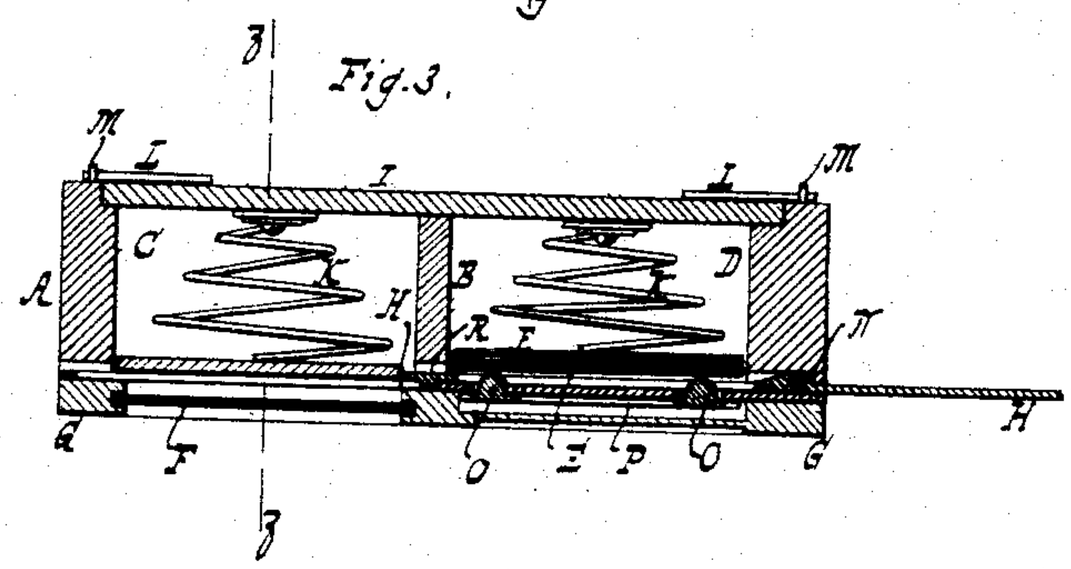


Fig. 4.

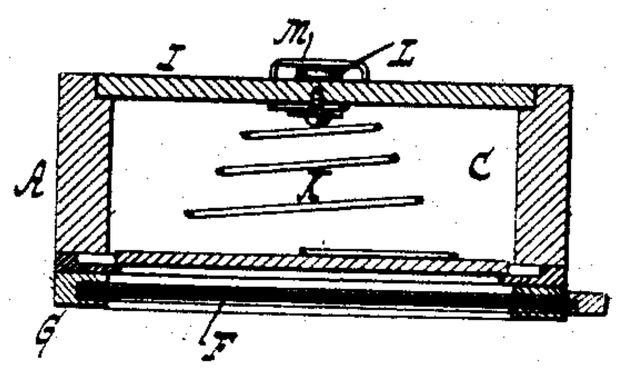


Fig. 5.

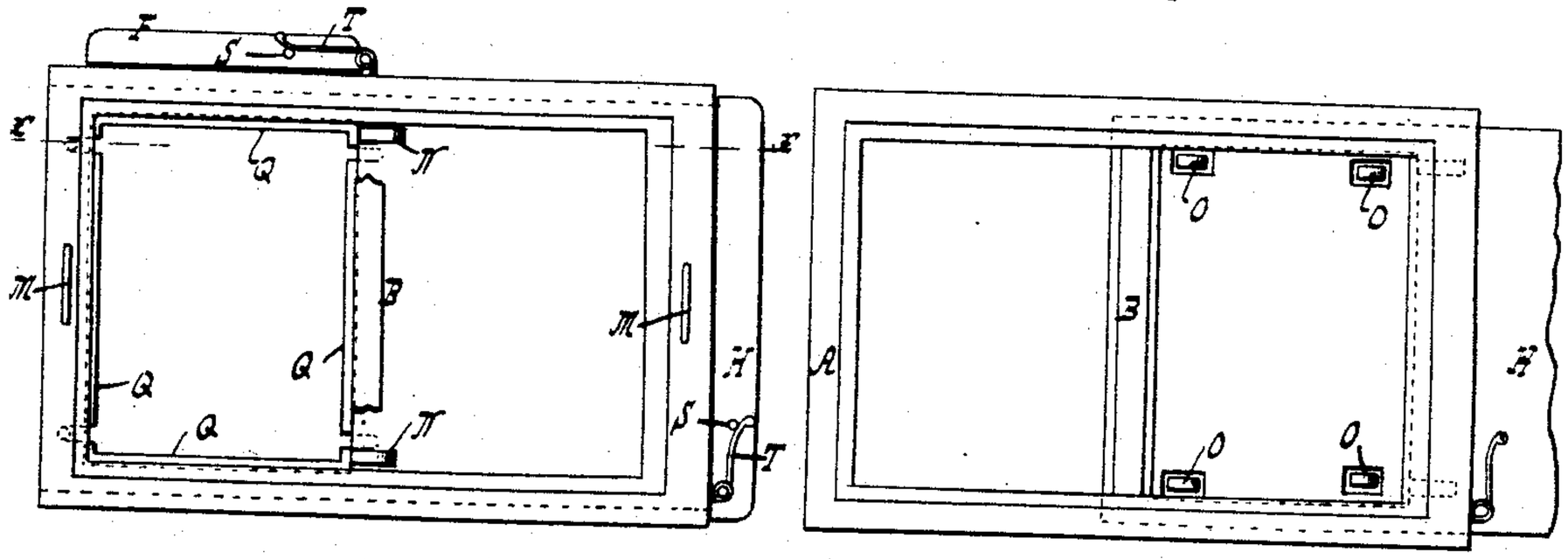
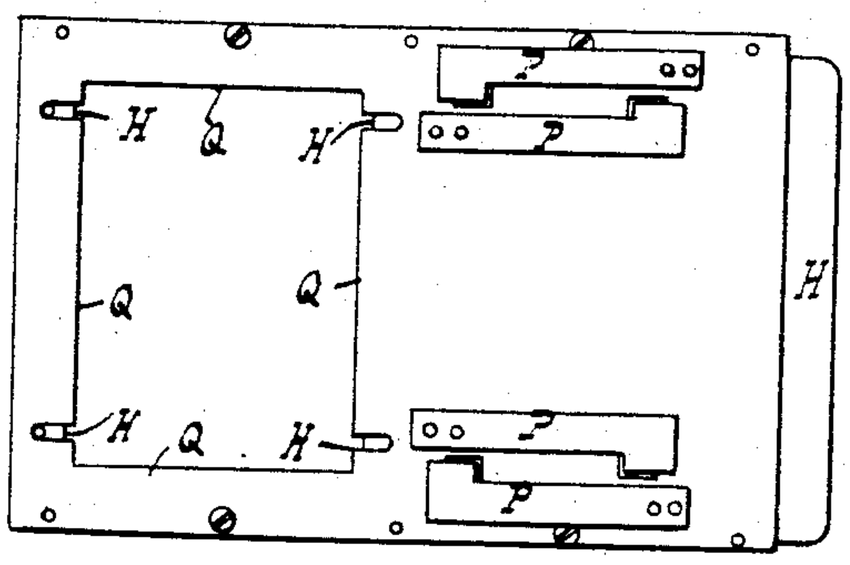


Fig. 6.

Fig. 7.



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PHOTOGRAPHIC-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 412,682, dated October 8, 1889.

Application filed January 17, 1889. Serial No. 296,587. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH THORPE, a subject of the Queen of Great Britain, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Photographic-Plate Holders, of which the following is a specification.

This invention relates to an improvement in photographic-plate holders, and by means of this invention one plate can be rapidly exposed after another, as set forth in the following specification and claims and illustrated in the accompanying drawings, in which—

Figure 1 is a sectional elevation of a plate-holder, the section being taken along line *x x*, Fig. 5. Fig. 2 is a section along the line *y y*, Fig. 1. Fig. 3 is a view similar to Fig. 1, with parts in a different position than in Fig. 1. Fig. 4 is a section along the line *z z*, Fig. 3. Fig. 5 is a rear view of Fig. 1, the back being removed. Fig. 6 is a view similar to Fig. 5, with parts in a different position. Fig. 7 is a face view of Fig. 1, the cover being removed.

Similar letters indicate corresponding parts.

In the drawings, the letter A indicates the walls or frame of the plate-holder. A partition B divides the holder into the photograph-chamber C and the receiving-chamber D. When a sensitive plate E has been exposed in the photograph-chamber, said plate is moved to the receiving-chamber. The withdrawal of the slide F exposes a sensitive plate. Said slide F is suitably mounted in the cover G of the holder. The movements of the slide or carrier H transfer the plates from the photograph to the receiving chamber. The back I is provided with springs K, which press on the sensitive-plates, so as to hold the plates toward the front of the holder. The back I can be readily removed by moving the latches L out of engagement with the eyes M on the frame A, when the back is free to be taken out of its place. The slide or carrier H has a lifter or shoulders N, which, as seen in Fig. I, hold the plate or plates E in the receiving-chamber D out of the way of the plate E that is about to move from the photograph-chamber C into the chamber D. Said chamber D also has lifters O, the springs P of which tend to force the lifters O through suitable openings in the chamber D.

The device operates as follows: The parts being in the position shown in Fig. 1, the front plate E in the chamber C moves into a cut-out portion or opening in the slide H, said opening being large enough for the passage of the plate E. The plate E is prevented from falling out of the apparatus by the rim Q, Fig. 5, at the front of the chamber C. When the plate E has been suitably exposed, the slide H is moved to the position shown in Fig. 3, thus drawing the plate E, which has been exposed, from the chamber C, through the passage R in the partition B, into the receiving-chamber D. The lifters O, which before were pressed back by the full portion of the slide H, are now pressed by their springs P through the cut-out portion of the slide H and move the plates E to the position shown in Fig. 3, so that said plates will be out of the way of the slide H when said slide is moved back to the position shown in Fig. 1. When in the position shown in Fig. 1, the full portion of slide H has again pressed the lifters O back out of the chamber D. By reciprocating the slide H one plate after another can thus be brought from the photograph-chamber C into the receiving-chamber D. The stops S on the slides F H can be engaged by the springs T to prevent the slides from accidentally moving. When the slides F H are moved out of the holder, the springs T snap to the side of the stops S which is nearest the frame A, and will remain on this side when the slides are pressed back into the frame, thus indicating that the slides have been actuated.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a plate-holder having a photographic chamber and a receiving-chamber for the reception of the plates, of a slide having a recess of a size sufficient to receive a plate in the photograph-chamber, said slide, by its outward-sliding movement, drawing the plate in its said recess into the receiving-chamber, and lifters adapted to extend through the slide into the receiving-chamber and lift the plate from the recess of said slide, substantially as described.

2. The combination, in a plate-holder having a photograph-chamber and a receiving-chamber, both chambers being adapted for the reception of photographic plates, of a slide or carrier adapted to carry a plate from one chamber to the other, and spring-lifters for holding the plates in the receiving-chamber out of the way of the carrier, said lifters being operated at suitable intervals by the movement of the carrier, substantially as described.

3. The combination, with a plate-holder having a photographic chamber and a receiving-chamber, of a slide having a recess which receives a plate in the photographic chamber, said slide, by its outward-sliding movement, drawing the plate from the photographic chamber into the receiving-chamber, and having adjacent to its plate-receiving recess a projecting shoulder, which lifts the plates in the receiving-chamber as the slide is moved outward, substantially as described.

4. The combination, with a plate-holder having a photographic chamber and a receiving-chamber, of a slide having a recess which receives a plate in the photographic chamber, said slide, by its outward movement, drawing the plate from the photographic chamber into the receiving-chamber, and having a projecting shoulder which lifts the plates in the receiving-chamber as the slide is moved outward, and lifters adapted to pass through the slide and lift the plate from the recess thereof, substantially as described.

5. The combination, with a plate-holder having a photographic chamber and a receiving-chamber, each adapted to contain a series of independent plates, and a spring arranged in the photographic chamber for pressing the plates therein toward the opening for exposure, of a slide having a recess of a size to receive within it a plate, and into which recess the latter is pressed by the spring, said slide, by its outward movement, drawing the plate from the photographic chamber into the receiving-chamber, substantially as described.

6. The combination, with the plate-holder frame having a photographic chamber and a receiving-chamber, and provided with the springs T, of the slide F in front of the photographic chamber, for exposing a plate, and the slide H, adapted to receive a plate in the photographic chamber, and by its outward-sliding movement draw said plate into the receiving-chamber, said slides each having a stop-pin S to engage the springs on the plate-holder frame, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JOSEPH THORPE. [L. S.]

Witnesses:
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