

No. 766,835.

PATENTED AUG. 9, 1904.

A. J. MERZ.
PHOTOGRAPHIC PLATE HOLDER.

APPLICATION FILED JULY 1, 1902.

NO MODEL.

Fig. 1.

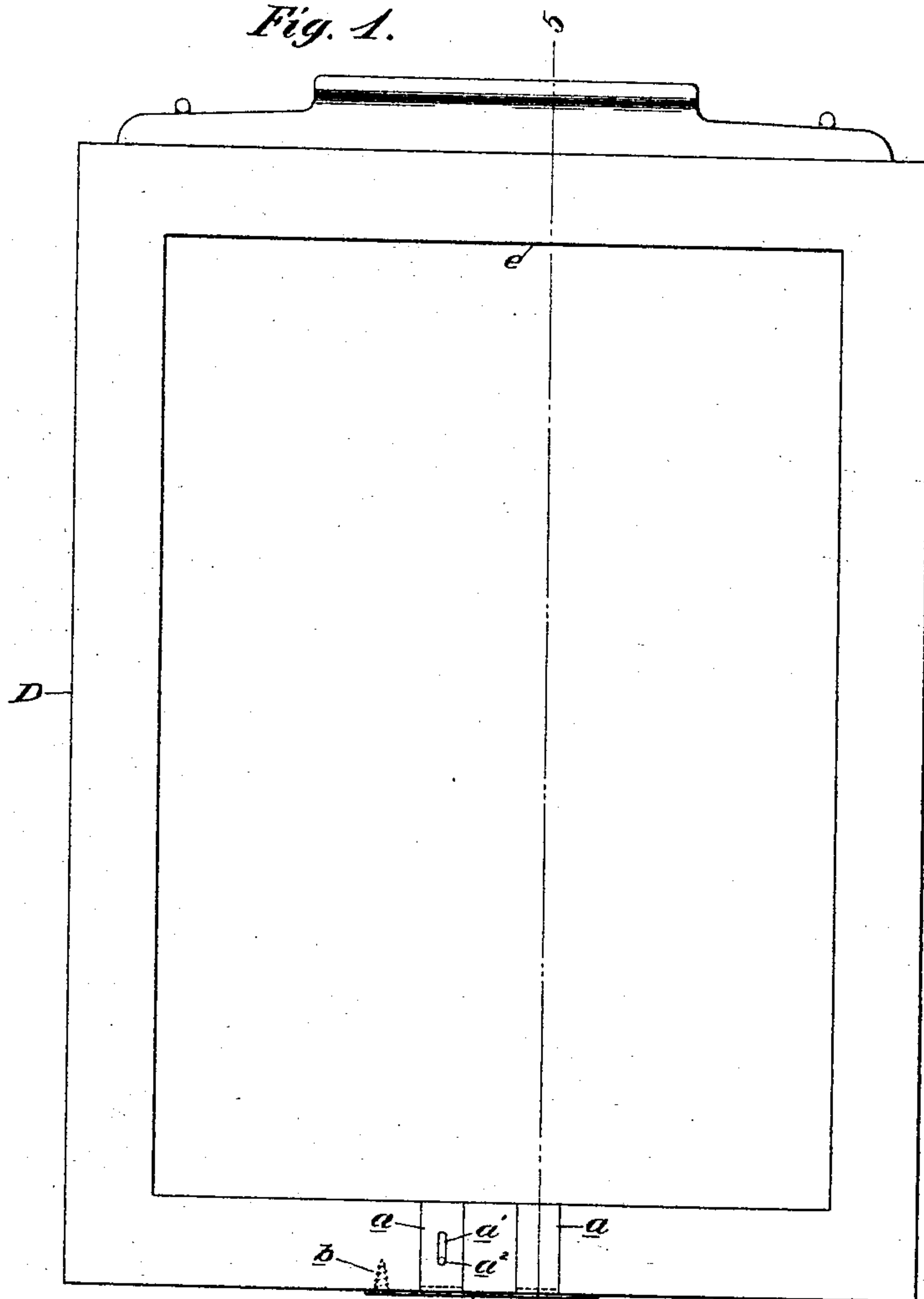


Fig. 2.

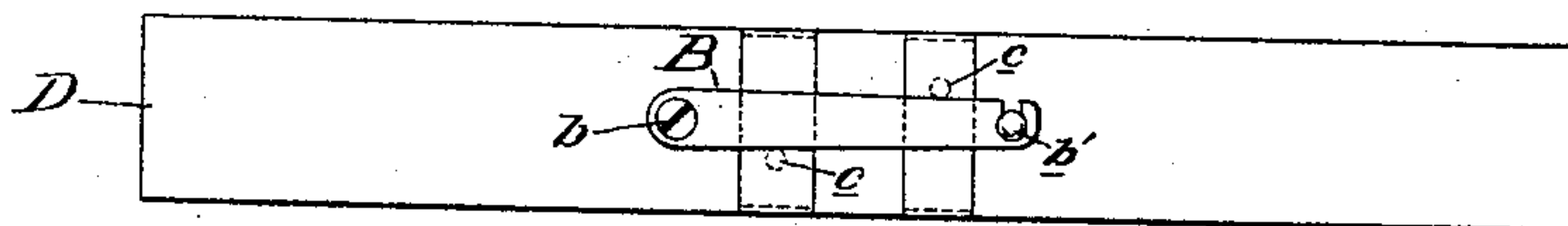


Fig. 4.

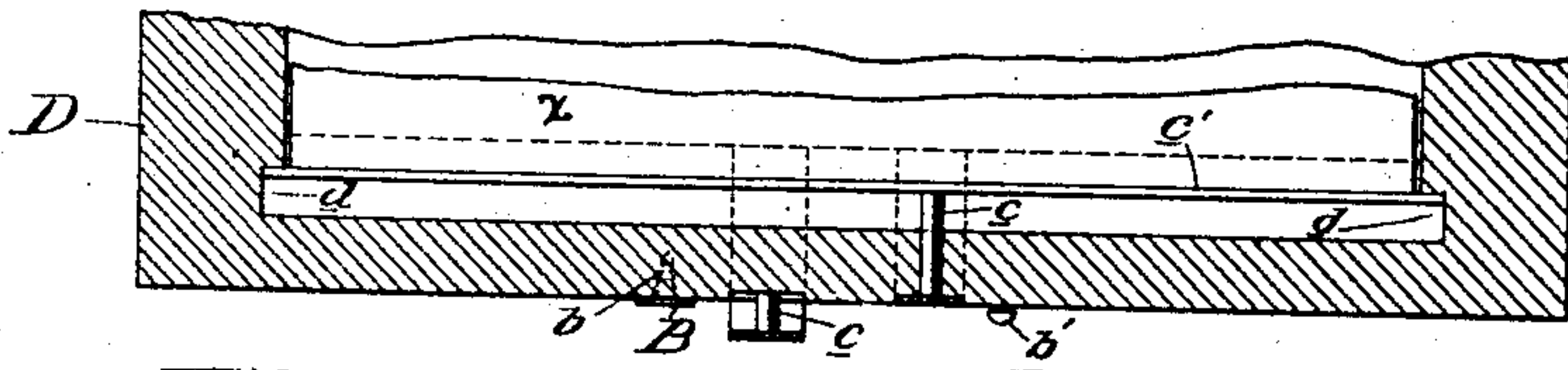
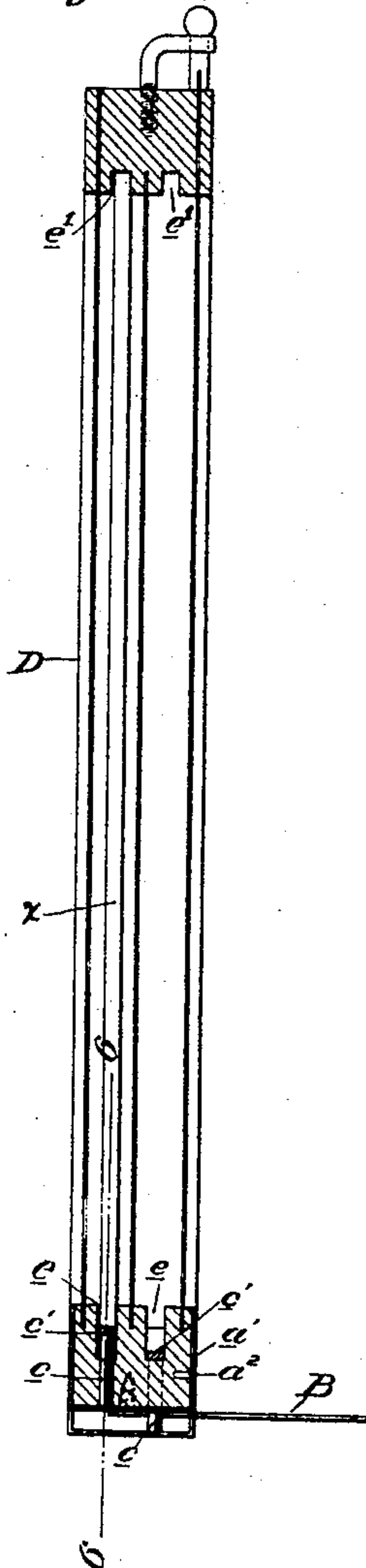


Fig. 3.



Witnesses:

L. J. Browning
W. A. Stahlman

Inventor:

Alfred J. Merz
by his Attorneys
Pulchert, Davidson & W. H. H.

UNITED STATES PATENT OFFICE.

ALFRED J. MERZ, OF YONKERS, NEW YORK, ASSIGNOR TO LOUIS BORSUM, OF PLAINFIELD, NEW JERSEY.

PHOTOGRAPHIC-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 766,835, dated August 9, 1904.

Application filed July 1, 1902. Serial No. 114,006. (No model.)

To all whom it may concern:

Be it known that I, ALFRED J. MERZ, a citizen of the United States, residing at 32 Warburton avenue, city of Yonkers, county of Westchester, State of New York, have invented certain new and useful Improvements in Photographic-Plate Holders, of which the following is a specification.

The object of this invention is to provide a compact, simple, and efficient means for positively locking the sensitized glass plates in a plate-holder. Heretofore various devices for this purpose have been suggested. Usually the reaction of a spring is relied upon to secure the locking of the plate. In plate-holders constructed in accordance with the present invention the plates are locked by a positively-acting device controlled by the operator and so constructed and applied as not to complicate the structure or increase the dimensions of the plate-holder.

In the accompanying drawings, which show the invention in a practical and efficient form and which is the best form now known to me, Figure 1 is a front elevation of a plate-holder constructed in accordance with this invention; Fig. 2, an elevation of the rear end of the plate-holder; Fig. 3, a vertical section on the line 5 5 of Fig. 1, showing the locking devices in sectional elevation with one slide of the plate-holder removed and one of the plates in locked position; and Fig. 4 is a longitudinal section on the line 6 6 of Fig. 3, showing one end of the plate-holder with one of the plates in locked position.

The photographic-plate holder D (depicted in the drawings) is, except for the special improvements or devices hereinafter described, of an ordinary well-known construction. Its back end and contiguous side faces are recessed to receive two flat metal strips *a a*, bent into U-shaped yokes to conform to the section of the plate-holder at this point and free to slide in or out, the extent of such movement being limited by the length of the slots *a'* and pins *a''*. When the metal pieces *a a* are in their normal position, as in Fig. 1, they are held in place by a latch B, pivoted at one end on a screw *b* and at the other end provided with a

slot to engage the button-head pin *b'*. The yokes or pieces *a* in their movement in or out control, respectively, the motion of two plungers or pins *c c*, sliding loosely in apertures in the frame and abut against thin straight strips *c' c'*, of metal or wood, seated loosely in the grooves *e* and interposed between the plungers and the edges of the plates to be locked. *x* indicates a plate. When a plate is removed from the holder, the strip *c'* is prevented from becoming dislodged by its extended ends, which project into recesses *d d* at the ends of the grooves *e*.

The operation is obvious, but may be briefly described as follows: After removing the slide or slides of the plate-holder the latch B is disengaged from the pin *b'* to permit one or both of the metal yokes or bent strips *a* to slide outwardly. The edge of a plate *x* may then be inserted in the groove *e* and the strip *c'* forced to the bottom of the groove, or if the holder is held in an upright position, with the front end uppermost, the yoke *a* may fall to its outer position, and with it the plunger *c* and the locking-strip *c'*. The edge of the plate having been inserted in the groove *e*, the plate is allowed to fall into position, and then by pressing inwardly the corresponding yoke the plunger *c* and strip *c'* will be forced in and the front edge of the plate will pass into the groove *e'* at the front side or end of the holder. The latch B is then secured as in Fig. 2 and holds the yokes *a a* in position. Obviously the plates will be held positively.

The plungers *c* are merely straight pieces of metal sliding in corresponding apertures in the frame. They are prevented from falling outwardly by the metal yokes *a*, and of course their inward movement is limited by their locking-strips *c'*.

I claim as my invention—

1. A photographic-plate holder having usual opposite grooves for the reception and retention of a plate, combined with a plate-locking device loosely seated in the groove, opposite the end at which the plate is inserted, and a positively-actuated member for pressing said device against the plate and so locking it.

2. A photographic-plate holder formed with usual opposite grooves for the reception and retention of a plate, combined with a locking-strip loosely seated in the bottom of the groove opposite the end at which the plate is inserted, a device sliding loosely in the wall of the plate-holder and acting directly upon the strip to lock the plate, and means for positively locking said device.
3. A photographic-plate holder formed with usual opposite grooves for the reception and retention of a plate, combined with a locking-strip loosely seated in the bottom of one of the grooves, a locking-pin arranged at right angles to the locking-strip, sliding loosely in an aperture in the end wall of the plate-holder and abutting against said strip, and a locking-piece sliding on the end of the frame for acting upon the pin endwise and so locking the plate.
4. A photographic-plate holder having opposite grooves for the reception and retention of a plate one of which extends beyond the inner side walls of the frame, a locking-strip loosely seated in the latter groove and held therein by the shoulders formed by the extensions at each end of the groove, a pin loosely sliding in the end wall of the frame and acting upon the locking-strip, a movable metal yoke sliding on the end of the frame and placed over the outer end of the sliding

pin and means for locking the yoke for the purpose set forth.

5. A photographic-plate holder having usual opposite grooves for the reception and retention of a plate, combined with a member fitting and sliding within limits on the end of the frame, means for locking said member, and a plate-locking device controlled thereby.

6. A photographic-plate holder formed with usual opposite grooves for the reception and retention of a plate combined with a pin sliding in the end wall of the frame, a yoke acting on the pin and placed over its outer end and sliding within limits on the end wall of the frame, means for locking the yoke, and a plate-locking device acted upon by the inner end of the pin.

7. A photographic-plate holder formed with usual grooves for retention of two sensitized plates, two positively-acting independently-operatable plate-locking devices, one for each plate, and a securing device for securing or releasing both said locking devices at the same time.

In testimony whereof I have hereunto subscribed my name.

ALFRED J. MERZ.

Witnesses:

CURT. N. GOTTLINT,
ARTHUR ROWLAND.