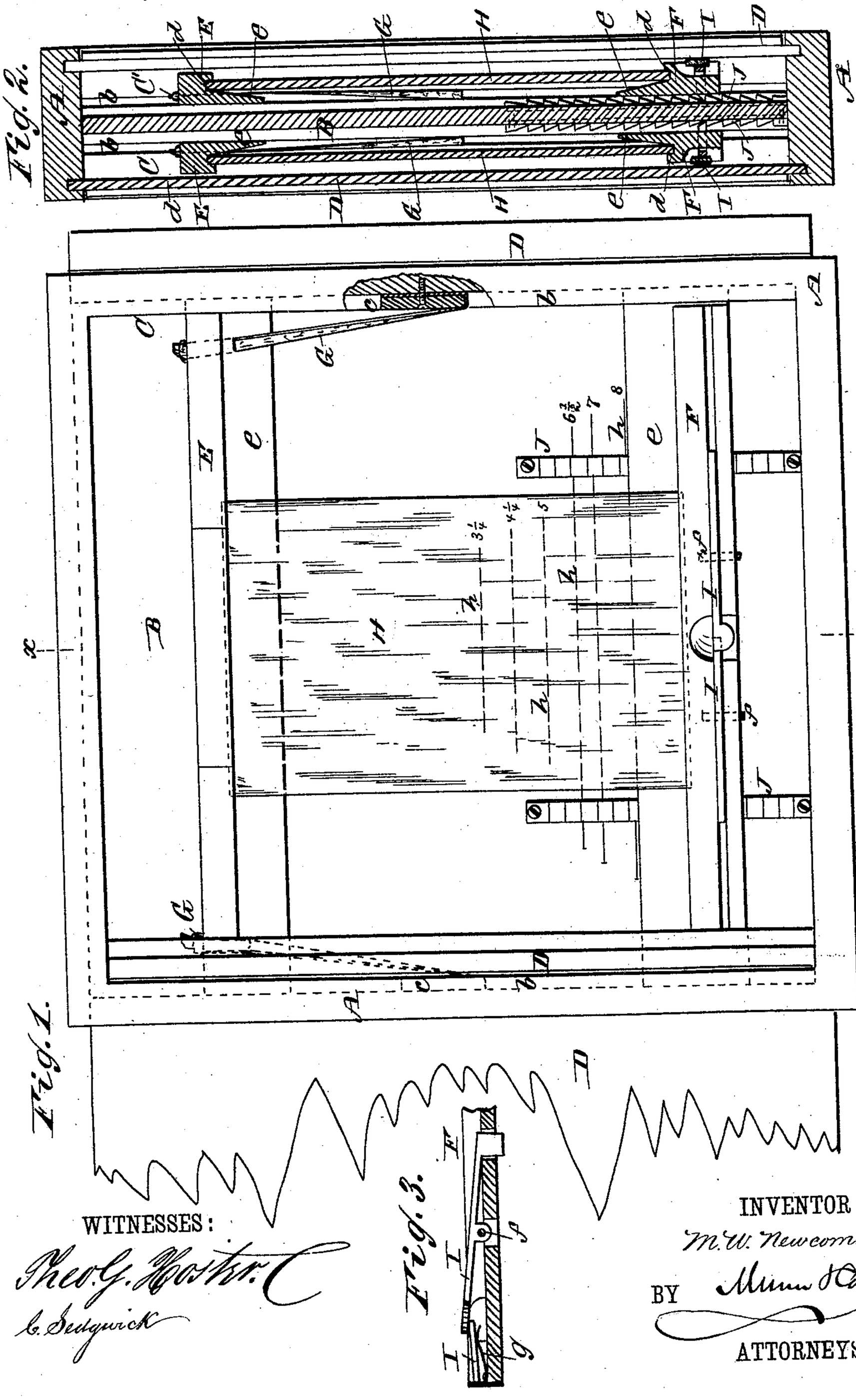
(No Model.)

M. W. NEWCOMB.

PHOTOGRAPHIC PLATE HOLDER.

No. 282,756. Patented Aug. 7, 1883.



UNITED STATES PATENT OFFICE.

MARION W. NEWCOMB, OF MARYSVILLE, KANSAS.

PHOTOGRAPHIC-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 282,756, dated August 7, 1883.

Application filed March 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, MARION W. NEWCOMB, of Marysville, in the county of Marshall and State of Kansas, have invented certain new and useful Improvements in Photographic-Plate Holders, of which the following is a full, clear, and exact description.

This invention relates to dry-plate holders for photographers' use; and it consists in certain novel constructions of the same and combinations of devices for adjusting the holder to work different-sized plates.

These improvements include a close or solid center piece extending wholly across the frame of the holder intermediately of its depth or thickness, whereby the holder may be reversed and its opposite sides or faces be utilized; a ratchet and spring-catch mechanism for varying the position up or down of the lower cross-bar, which holds the one edge of the plate without removing said bar from the holder; an upper sliding cross-bar with spring attachments for holding the plate to its place, and a gage on the center piece for adjusting the holder to different-sized plates, substantially as hereinafter described. A photographic-plate holder constructed in accordance with my invention provides alike for rapid work and accuracy of focus, is reversible to receive different or all sized plates on opposite sides of it, and is alike applicable to indoor and outdoor work, and for all kinds of work, without any liability of the glasses or plates being broken or falling out.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a partly-broken one-side or face view of a photographic-plate holder embodying my invention. Fig. 2 is a section of the same on the line *x x* in Fig. 1, with one of the shields removed; and Fig. 3 is a sectional view of a spring-catch used to provide for the adjustment and retention in its place of the one or lower cross-bar that supports the plate.

A is the rectangular frame of the holder, which is open on both of its opposite sides or faces; and B is a close center piece or board arranged parallel with the faces of the frame intermediately of its depth, and whereby provision is made for reversing the holder or utilizing it on both of its sides or faces. The advantage of this will be readily perceived when it is considered that professional photographers often have several subjects in their rooms at the same time to be photographed and often have different-sized work to do. In such cases the operator can use either the same or different sized plates on opposite sides of the holder, and can bring two or more of such reversely-arranged plates from the dark room and make double or reverse exposures before returning. To provide for this each of the plate-holding chambers C C′ on opposite sides or faces of the center partition, B, and formed by said partition and frame A combined, is provided with a sliding shield or lid, D, constructed to effectually exclude the light when required, and preferably arranged to open in reverse directions to one another, for facilitating the use of the holder.

The frame A is constructed with grooves *b b* along the interior of its opposite side pieces, to form slideways in both chambers C C′ for tenons on the ends of the cross-bars E F, which hold the sensitized plates, to move in. The upper ones, E, of these cross-bars are attached at their ends to the sides of the frame by springs G G, arranged to pull or draw said cross-bars toward the center of the frame. These springs may be simple rubber ones secured at their one end to the cross-bars E, and at their opposite end by blocks *c c* to the sides of the frame. These cross-bars E serve to hold the plates H H down to their places between said bars and the lower bars, F. Both sets of bars E F are grooved, as at *d*, to receive the top and bottom edges, respectively, of the plates within them, and are made to receive plates of any desired size and thickness, and are constructed sloping, as at *e*, to automatically direct the plates H, as it were, to their places in the grooves *d*.

The lower cross-bars, F, are each provided with a spring-catch, which may consist of duplicate levers I I, pivoted, as at *f f*, and one of which is controlled by a spring, *g*, and passes at its inner end under the inner end of the other lever. These levers engage at their outer ends, excepting when pressed down by the thumb to release them, with ratchet or other equivalently-constructed stop-bars J J, secured to the faces of the center piece, B. Those

portions of the opposite faces of the center piece, B, over which the cross-bars F are arranged to move have gage lines or marks *h h* on them corresponding to the different-sized plates designed to be used, including plates for cabinet, card, panel, and other sized photographs. Thus the center piece, B, or back of each plate-holding chamber C C′ is provided with or forms a gage for different-sized work, and which, as hereinbefore specified, may differ on both sides of the holder.

To change for large or small plates it is only necessary to place the thumb upon one of the levers I of the spring-catch, so as to disengage the lower cross-bar, F, from the ratchet or stop devices J. This leaves said bar at liberty to move or be moved, with little or no effort, to the proper gage-mark *h* for the plate over the center piece, B. The top cross-bar, E, in either chamber C C′, being controlled by the springs G G, does not require to be manipulated; but its movement up or down is adjusted by the upper edge of the sensitized plate itself as the same is passed into the groove in said bar for holding its upper edge. In this way, no matter what the size of the plates may be, they will always be self-adjusting to bring them exactly in focus and opposite the camera.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a photographic-plate holder, the combination of one or more upper plate-holding cross-bars, E, attached by a spring or springs to the holder for operation, as described, one or more plate-holding cross-bars, F, adjustable toward or from the upper cross bar or bars, and means for holding said bar or bars F when adjusted, substantially as described.

2. The combination, in a plate-holder, of the levers I I, the spring *g*, and the stationary ratchet-bars or holding devices J J, with the plate-holding cross-bar F, essentially as specified.

3. The gage *h h* on the back of either plate-holding chamber C or C′, in combination with the adjustable lower cross-bar, F, and sliding upper cross-bar, E, and its controlling spring or springs G, substantially as and for the purposes herein set forth.

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Witnesses:
W. H. SMITH,
H. W. HAGAR.