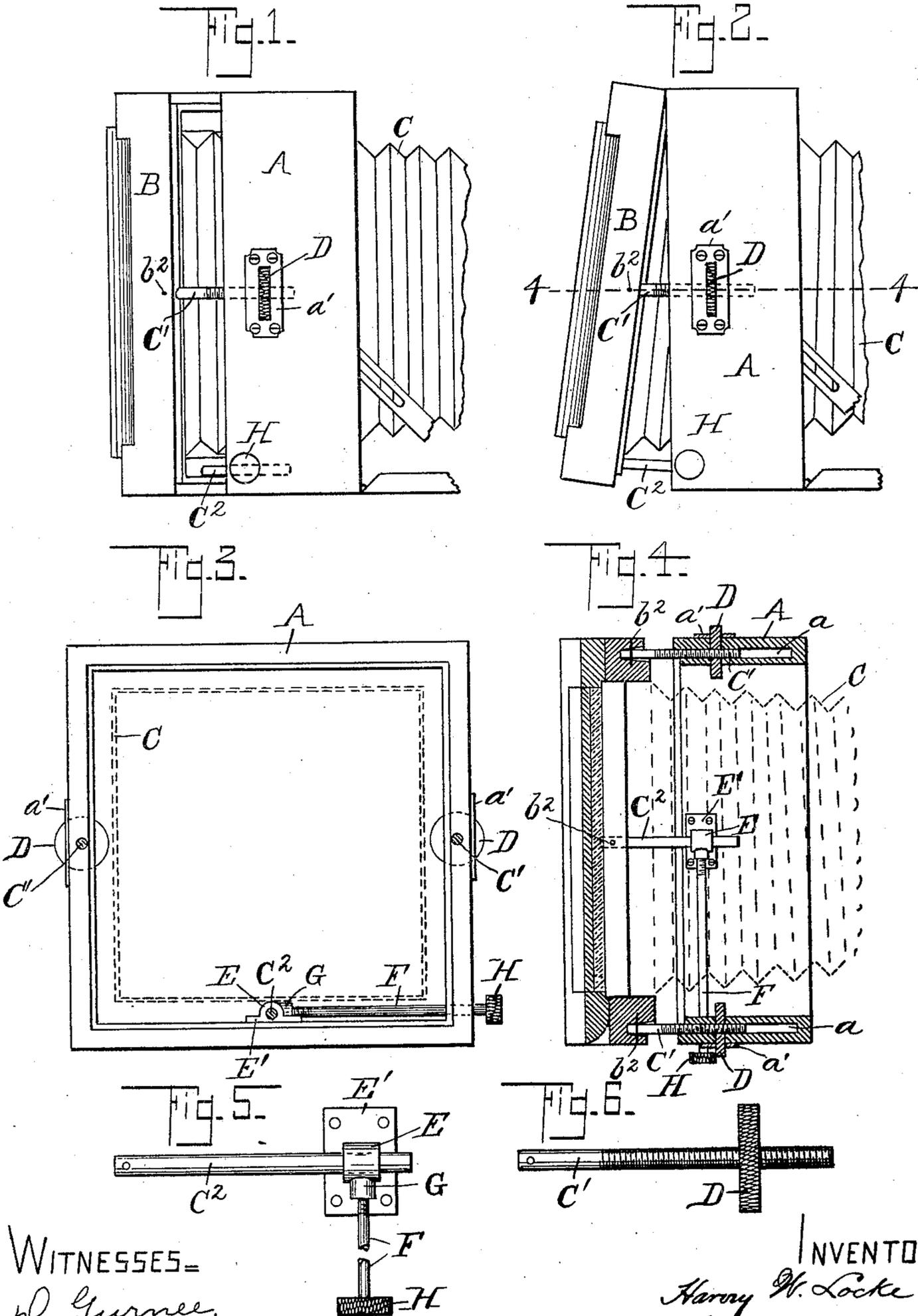


H. W. LOCKE.

SWING BACK FOR PHOTOGRAPHIC CAMERAS.

APPLICATION FILED NOV. 20, 1902.

NO MODEL.



WITNESSES=
 W. Gurnee.
 F. Bissell.

INVENTOR.
 Harry W. Locke
 by Ogden J. Davis
 his attys

UNITED STATES PATENT OFFICE.

HARVEY W. LOCKE, OF ROCHESTER, NEW YORK, ASSIGNOR TO CENTURY CAMERA COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

SWING-BACK FOR PHOTOGRAPHIC CAMERAS.

SPECIFICATION forming part of Letters Patent No. 755,680, dated March 29, 1904.

Application filed November 20, 1902. Serial No. 132,092. (No model.)

To all whom it may concern:

Be it known that I, HARVEY W. LOCKE, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Swing - Backs for Photographic Cameras, of which the following is a specification.

This invention relates to swing-backs for photographic cameras, and has for its object to provide simple and efficient means whereby a swing-back can be readily and accurately adjusted and easily manipulated.

In the drawings, Figure 1 represents a side elevation of a camera-box and swing-back. Fig. 2 is a side elevation of the same parts in different relative positions. Fig. 3 is a front end view of the camera-box with the swing-back removed. Fig. 4 is a section on the line 4 4 of Fig. 2, and Figs. 5 and 6 are enlarged views of certain parts of the mechanism.

A represents the camera-box, B the swing-back, and C the bellows. The bellows C are attached to the frame B' of the swing-back and extend through the camera-box A, as represented in Fig. 4, in the usual way.

The swing-back B as one part is adjustably supported upon the camera-box A as the other part by means of a rod on each side and a lower rod, each of which is independently extensible and retractable and is fastened to one of said parts and is movably supported on the other part and is provided with means for holding them, and therefore the swing-back, in different set positions. The outer end of these three rods is fastened to one of said parts at separated points, and their inner ends are extensibly and retractably connected with the other part at corresponding points. In the specific construction represented the outer ends of the rods C' are respectively secured to the side rails of the frame B' by means of pins b², and the side rails are slotted to receive them, while the inner ends of said rods lie, respectively, in slots a in the side pieces of the frame A.

(See Fig. 4.) Again, for extension and retraction the said rods C' are provided with adjusting and holding devices and for this purpose in the present example are threaded to engage, respectively, stationary nuts D, (see Fig. 6,) which are revoluble in slots in plates a' in the sides of the frame A.

Either side of the swing-back B can be drawn in toward or forced away from the box A by turning the nut D on that side, and the nuts D retain the rods C', respectively, in the different extended or retracted positions. The slot a and the rods C' are of sufficient length for a proper range of adjustment, and the slots in the side rails of the frame B' are cut away (see Fig. 4) so that the swing-back B can tilt upon the rods C' with reference to the box A for vertical swing.

The lower rod C² is secured at one end to the frame B' by the pin b², while its other end is adapted to slide in the collar E. This collar E is attached to a plate E', (see Fig. 5,) which in turn is secured to the bottom of the box A.

To lock the rod C² in position, the rod F is employed, which enters the box A (see Fig. 4) and passing through a perforation in the side of the collar E engages the rod C². An internally-threaded collar G upon the first-mentioned collar E receives the end of the rod F, which is correspondingly threaded, and a head H for turning the rod F is fixed upon its other end and lies outside the box A. When the rod F is screwed into the collar G and engages the rod C², it locks said rod C² in place.

When the rod F is disengaged from the rod C², the swing-back B can be tilted upon the pivotal support on the ends of the rods C', so that its lower end will be either nearer to or farther away from the box A than its upper end. This effects the horizontal swing.

The side rods C' and the lower rod C² accordingly afford means for accurately adjusting or setting the swing-back B in any desired position, both of vertical and horizontal swing, with reference to the box A, and it can be locked in the set position.

What I claim is—

1. The combination of a camera-box as one part; a swing-back as the other part; three rods pivoted respectively, to one part, at separated points, and each extending through a socket-fastening on the other part.
2. The combination of a camera-box as one part; a swing-back as the other part; three rods pivoted, respectively, to one part, at separated points, and each extending through a socket-fastening on the other part; and means for locking said rods in their various positions of extension and retraction.
3. The combination of a camera-box as one part; a swing-back as the other part; adjustable pivotal supports between the sides of the two parts for one swing of said swing-back; a rod attached to the bottom of one of said parts; a collar attached to the other of said parts wherein said rod slides; and a lock for locking said rod and said collar in various positions of extension and retraction of said rod.
4. The combination of a camera-box as one part; a swing-back as the other part; extensible and retractable rods connecting said two

parts and pivoted to one of said parts for producing one swing of said swing-back; a rod attached to the bottom of one of said two parts; a collar attached to the other of said parts in which said rod is extensible and retractable; and a locking-rod for locking said collar and said extensible and retractable rod together.

5. The combination of a camera-box as one part; a swing-back as the other part; extensible and retractable rods connecting the sides of the two parts for one swing of said swing-back; a nut held in a stationary bearing on one of said parts and revoluble on threads on each of said rods; a rod connected to the bottom of one of said two parts; a collar attached to the other of said parts in which said last-mentioned rod is extensible and retractable; and locking means for locking said collar and said last-mentioned rod together.

HARVEY W. LOCKE.

Witnesses:

F. BISSELL,
D. GURNEE.