

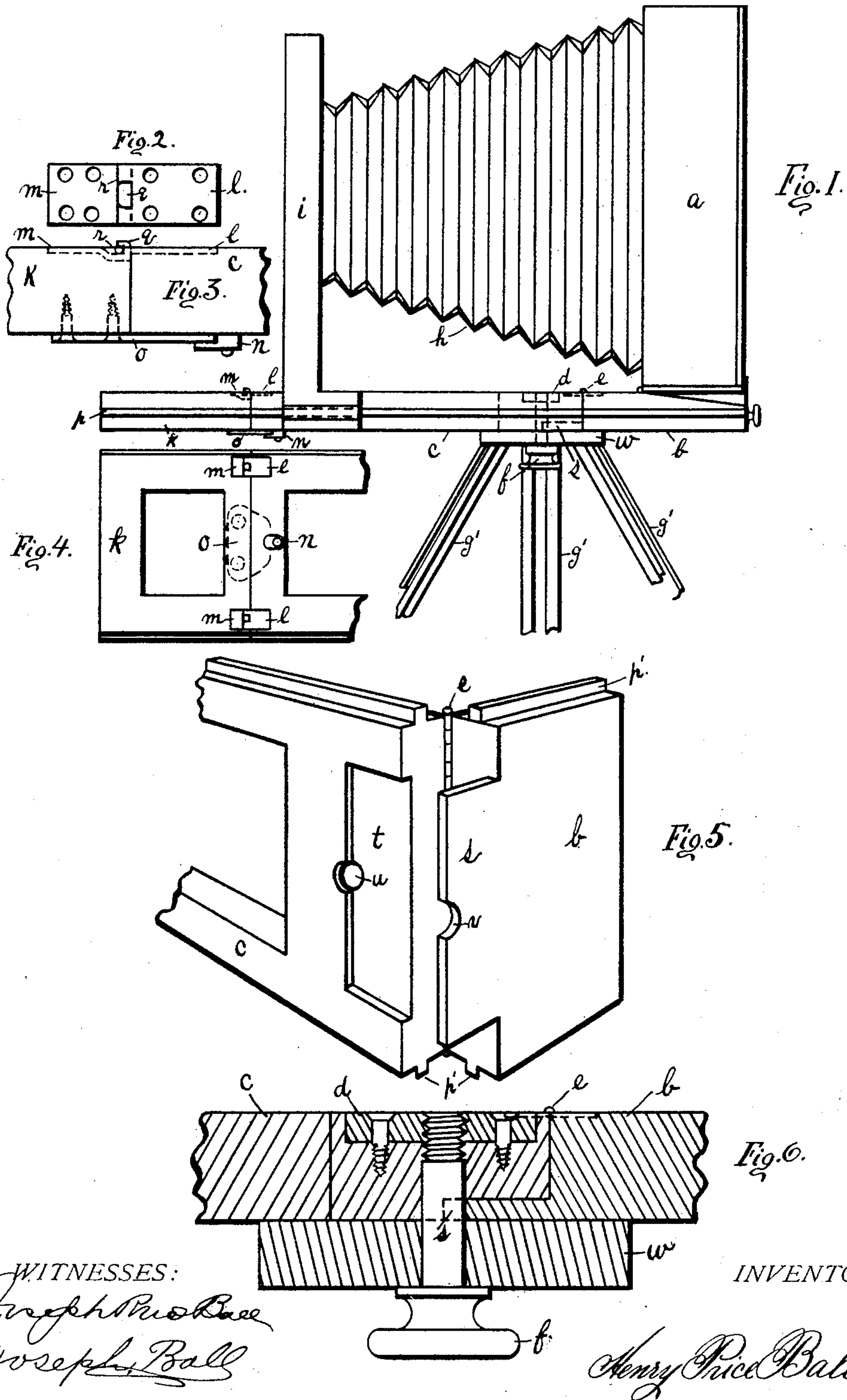
(No Model.)

H. P. BALL.

DEVICE FOR MAKING PHOTOGRAPHIC CAMERA BEDS RIGID.

No. 434,622.

Patented Aug. 19, 1890.



WITNESSES:

Joseph Price Ball  
Joseph Ball

INVENTOR

Henry Price Ball



# UNITED STATES PATENT OFFICE.

HENRY PRICE BALL, OF PHILADELPHIA, PENNSYLVANIA.

## DEVICE FOR MAKING PHOTOGRAPHIC CAMERA-BEDS RIGID.

SPECIFICATION forming part of Letters Patent No. 434,622, dated August 19, 1890.

Application filed July 10, 1889. Serial No. 317,048. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY PRICE BALL, a citizen of the United States, residing at Philadelphia, in the State of Pennsylvania, have invented a new Device for Making Photographic Camera-Beds Rigid, of which the following is a specification.

My invention relates to devices for making photographic camera-beds rigid.

The object of this device is to make the bed (which is generally made in two or more parts or sections hinged together) rigid, as if it were made in one piece.

Referring to the drawings, Figure 1 represents a side view of a photographic camera with my invention applied to it. Fig. 2 is a view of the catch or detachable hinge, looking at Fig. 3 from above. Fig. 3 is a side view of the camera-bed at the place where the extension *k* is attached. Fig. 4 is a view of the extension *k* of bed, looking from above. Fig. 5 is a perspective view of my invention. Fig. 6 is a sectional view of same.

Similar letters refer to similar parts throughout the several figures.

Referring to Fig. 1, the portions of the camera-bed *c* and *b* are hinged together by the hinge *e*. The extension *k* is attached to the front of the section *c* of the bed by means of the catches *m* and *l*, *m* having the hooked or bent projection *q*, Figs. 2 and 3, which passes through and hooks firmly in a slot in the end of plate *l*, as represented in Fig. 3. Now my invention relates to the method of preventing this bed and its extension from shaking and the joints bending when being used. This is accomplished by means of the lugs, projections, or projecting plates *s* on the bed proper in the one case and *o* on the extension *k* in the other. This projection or lug can be a metal or wooden plate or disk screwed or otherwise fastened on one of the sections and laying up flat against the contiguously-hinged section when the bed is straightened or opened for use, as at *o*, Fig. 3, or it can be constructed to fit in a recess in the contiguously hinged or joining section of the bed, as at *t*, Fig. 5, *s*, Fig. 1, and *s*, Fig. 6. This lug or projection *s* is held firmly against the bottom surface of the contiguously hinged or joining section of the bed or in the recess *t*, Fig. 5, by means of a button *n*, Figs.

1, 3, and 4, in the case of the extension and by means of the tripod-screw *f*, Figs. 1 and 6, in the case of the bed proper *c b*.

The method or way in which the joint *e* is stiffened when opened ready for use is by means of the tripod-top coming immediately across the joint between *s* and *t*, Fig. 5, and the tripod-screw being screwed through the tripod-top *w* and the section of the bed *c*, holding the projection *s* firmly and rigidly between the tripod-top and the section *c*, as clearly shown in Fig. 6.

The method of stiffening the extension joint or hinge *r q*, Fig. 3, can be done in precisely the same way or manner as the joint or hinge *e*, as just described. It may be advantageous in some cases, however, to do away with a screw and employ a button, as *n*, Figs. 1, 3, and 4. The lug or projection *o* in this case can be precisely the same as the lug or projection *s*, Figs. 1, 5, and 6; but in the drawings this projection *o* is shown as a projecting metal plate screwed on the bottom surface of the extension *k*, so that it is not necessary to have the section *c* recessed as in the other joint *e* for its retention thereby, not disfiguring the end of the section *c* more than having attached to it the catches *l l* and the button *n*. This button, be it understood, can be replaced by a screw, as *f*, or by any other catch without differing from my invention. Referring to hinged section *c* and *b* it can be seen at once it is not necessary so have the projecting portion *s* attached or integral with one section in preference to the other, as it can be applied or project from one section *c* as well as the other *b*.

The advantage in having the projection attached or integral with the rear portion or section *b* is in having the tripod-top thereby brought more directly vertically under the center of gravity of the whole camera, an object to be greatly desired. This projection *s* can be constructed of a metal plate screwed or otherwise fastened on the section *b* or *c*, but preferably on *b*.

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

1. A camera-bed consisting of two or more sections hinged together, one section having attached to it or integral with it lugs or projections which are adapted to fit into recesses



in the contiguously hinged or adjoining section of the bed when the bed is straightened ready for use, the whole being held rigidly straight by means of a screw passing through  
5 the lug or projection on the one section and screwing into the other section.

2. A camera-bed composed of two or more sections, one section having a lug or projecting metal plate which fits into a recess in the  
10 adjoining hinged section when the bed is straightened, the bed being held rigid by means of the tripod-top coming across the under side of the hinged joint, the tripod-screw being screwed through the tripod-top  
15 and the lug or projection into the upper part of the bed, as specified.

3. A detachably-hinged camera-bed extension *k*, having a lug or projecting metal plate on its under surface and a detachable hinge or  
20 catch *m l* on its upper surface, the projecting plate *o* coming flat against the under surface

of the camera-bed proper *c* when the extension is attached, the lug or projecting plate *o* being held firmly against the under surface of the camera-bed proper *c* by means of the  
25 button or catch *n* or a screw similar to *f*.

4. The camera-bed *c b*, having the lug or projection or projecting plate *s* on one section, which engages or fits or lies in a recess *t* when the bed is straightened ready for use,  
30 the bed being held rigidly and stiffly straight by means of the tripod-top *w* lying across the joint, and being held firmly against it by means of the tripod-screw *f* being screwed through the tripod-top *w*, the end of the pro-  
35 jection *f*, and the section *c* into the nut *d*, holding the parts *w*, *b*, *s*, *c*, and *d* firmly together as if they were one piece, as specified.

HENRY PRICE BALL.

Witnesses:

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