

(No Model.)

W. KELSEY.
FOLDING BED.

No. 479,599.

Patented July 26, 1892.

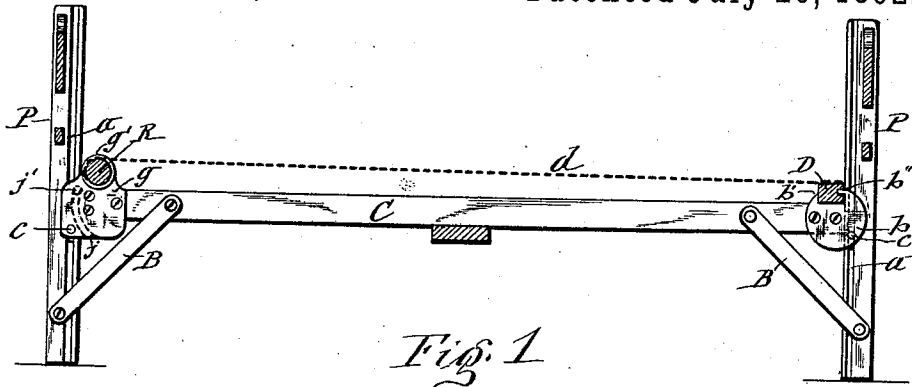


Fig. 1

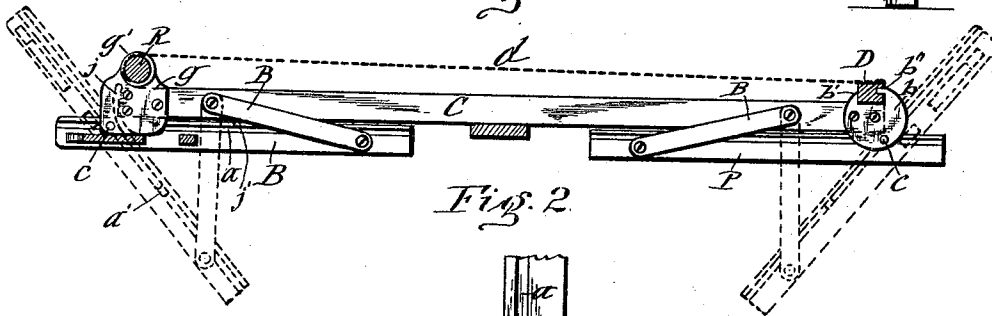


Fig. 2

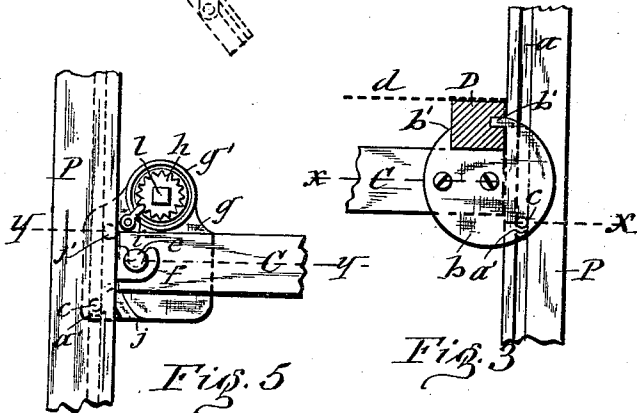


Fig. 5

Fig. 3

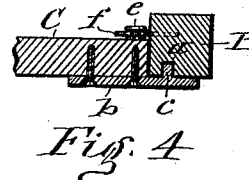


Fig. 4

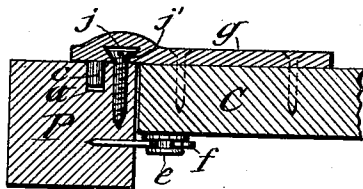


Fig. 6

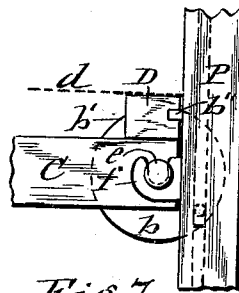


Fig. 7

WITNESSES:

C. L. Bendixon
H. E. Baes.

INVENTOR:

Winfield Kelsey
BY
Shull, Laass & Shull
ATTORNEYS

UNITED STATES PATENT OFFICE.

WINFIELD KELSEY, OF KASOAG, NEW YORK, ASSIGNOR TO FANNIE E. KELSEY, OF SAME PLACE.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 479,599, dated July 26, 1892.

Application filed January 18, 1892. Serial No. 418,365. (No model.)

To all whom it may concern:

Be it known that I, WINFIELD KELSEY, of Kasoag, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Folding Beds, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of bedsteads in which the posts are adapted to fold under the side rails; and the invention consists in the improved construction and combination of parts, as hereinafter described, and set forth in the claims.

In the annexed drawings, Figure 1 is a vertical longitudinal section of a bedstead embodying my invention. Fig. 2 shows the same in its folded condition in full lines and indicates the movement of the post toward the said folded condition by dotted lines. Fig. 3 is an enlarged side view of the sliding coupling of the rail and post. Fig. 4 is a transverse section on line *xx* in Fig. 3. Fig. 5 is an enlarged end view of the roller to which one end of the wire mattress or canvas or other flexible bed-bottom is connected and by which the tension of said bed-bottom is adjusted. Fig. 6 is a further enlarged transverse section on line *yy* in Fig. 5, and Fig. 7 is an enlarged outer side view of the connection of the post to the side rail.

Similar letters of reference indicate corresponding parts.

PP represent the posts, and CC the side rails of the bedstead. Said posts are each provided with a vertical groove *a*, and to each of the side rails is rigidly attached the metal plate *b*, which laps onto the side of the post and has on its lapping portion a lug *c*, which extends into the groove *a* and is located below the bottom of the rail, so as to allow the post to be swung downward and inward and made to lie compactly on the under side of the rail C, as shown in full lines in Fig. 2 of the drawings. The reverse movement of the post is limited by a stop *a'* in the groove coming in contact with the lug *c*. To carry the post into said position and also brace the bedstead in its erect position, I pivot to the foot of the

post the brace B, the upper end of which is 50 pivotally connected to the side rail C.

D denotes the cross-bar, which is rigidly attached to the top of the ends of the side rails and has connected to it one end of the wire mattress or canvas or other flexible bed-bottom *d*. In order to brace said cross-bar 55 so as to more effectually resist the strain exerted on it by the aforesaid flexible bed-bottom, I form the plate *b* with a shoulder or abutment *b'*, which engages the inner side of 60 the cross-bar, and with a hook *b''*, which extends into the rear portion of the cross-bar. The abutment *b'* prevents the cross-bar from being drawn lengthwise of the side rails, and the hook *b''* holds the cross-bar down and prevents its tilting. To relieve the grooved portion of the post from the strain of the lug *c* when the bed is erect and in use, I attach to the side of the rail C a stout screw *e* or other similar projection, and to the post I attach 70 the safety-hook *f*, which engages said projection as the post is placed erect.

On one end of the bedstead I employ a roller R, to which one end of the flexible bed-bottom *d* is attached, and can be tightened when 75 required. This roller is mounted on metal plates *g*, which are firmly secured to the inner sides of the side rails CC and are formed with bearings *g'* for the journals of the roller. The outer end of one or both of the journals 80 is formed with a ratchet-wheel *h*, and to the plate *g* is connected a suitable dog *i*, which engages said wheel. A square or hexagonal hub *l* projects from the center of the ratchet-wheel for the application of a wrench by which to 85 turn the roller when desired to tighten the flexible bottom *d*.

The plate *g* laps onto the side of the post P and is provided with the lug *c*, which engages the vertical grooves *a* of the post in the 90 same manner as the plate *b*, hereinbefore described, and in order to prevent the side rails from moving laterally outward and to insure the retention of the lug within the groove I provide the plate *g* with the segmental groove 95 *j* in the side adjacent to the post. Said groove is undercut or dovetailed. A stud-pin *j'*, rigidly attached to the side of the post,

terminates with a head within the groove *j*, as shown in Fig. 6 of the drawings. Said groove extends from the bottom edge of the plate upward to a point in line with the top of the side rail, and the center from which the segment of the groove is described is a short distance below the top of the side rail, and thus the upper end of the groove with the lug engaging the same forms a lock, which retains the post in its erect position.

What I claim as my invention is—

1. In combination with the side rail, the post provided with a vertical guide-groove, a metal plate rigidly attached to the side rail and provided with a lug extending into said guide-groove, and a brace pivotally connected at opposite ends to the post and side rail and guiding the post to its folded position, as set forth.

2. In combination with the side rails and cross-bar attached to the ends of said rails, the posts provided with vertical grooves and metal plates attached to the side rails and provided with lugs extending into the grooves of the posts and with abutments engaging the aforesaid cross-bar, as set forth.

3. In combination with the side rails and cross-bar attached to the ends of said rails, the posts provided with vertical grooves and metal plates attached to the side rails and provided with lugs extending into the grooves

of the posts and with hooks holding down the outer portions of the cross-bar, substantially as described and shown.

4. In combination with the side rails and cross-bar attached to said rails, the posts provided with vertical grooves and metal plates provided with lugs extending into said grooves and with abutments engaging the inner side of the cross-bar and with hooks holding down the outer portion of said cross-bar, substantially as described and shown.

5. In combination with the side rail *C*, the posts *P P*, provided with the vertical grooves *a a*, the plates *b b*, fastened to opposite ends of the side rail and provided with the lugs *c c*, extending into said grooves, the braces *B B*, pivotally connected to the posts and side rails and guiding said posts into their folded positions, the projections *e e* on the side of the side rail, and the safety-hooks *f f*, projecting from the posts and engaging said projections to retain the posts in their erect positions, all constructed and combined to operate substantially as described and shown.

In testimony whereof I have hereunto signed my name this 14th day of January, 1892.

WINFIELD KELSEY. [L. S.]

Witnesses:

MARK W. DEWEY,
H. M. SEAMANS.