(No Model.)

F. ANSLEY.

FOLDING BED.

No. 456,932. Patented Aug. 4, 1891.

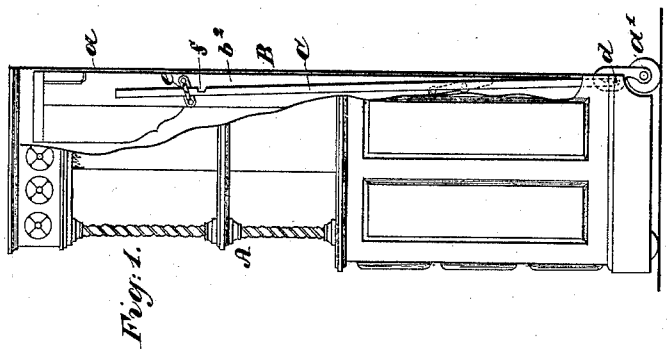


Fig. 1.

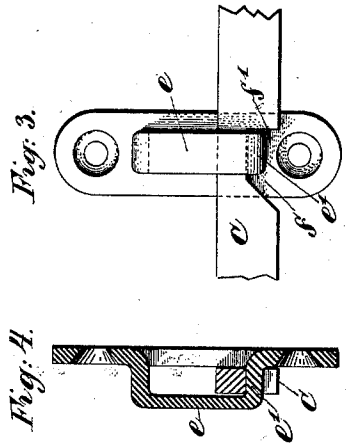


Fig. 3.

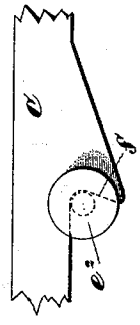


Fig. 5.

Fig. 4.

Fig. 2.

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FREDERICK ANSLEY, OF BROOKLYN, ASSIGNOR TO THE STANDARD FOLDING BED COMPANY, OF NEW YORK, N. Y.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 456,932, dated August 4, 1891.

Application filed December 3, 1890. Serial No. 373,398. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK ANSLEY, a citizen of the United States, residing in Brooklyn, Kings county, New York, have invented certain Improvements in Folding Beds, of which the following is a specification.

My invention relates to improvements in that class of folding beds wherein the bed-frame is wholly or in part counterbalanced by springs, and more especially to that division of such class in which the bed-frame is suspended in the standard by links or chains, as distinguished from those in which the bed-frame is mounted to turn on pivots. In such beds the standard is usually provided with large casters, in order that the bed may be conveniently moved about over the floor, and one pair of these casters is arranged at the rear edges of the extension-posts of the standard. Consequently, when the bed-frame is down, if an attempt is made to move the bed by lifting the foot of the bed-frame a little and then drawing the bed along the obstruction offered by the carpet to the free movement of the casters is apt to cause the standard to topple over backward and fall on the bed-frame. Indeed, there is danger of this occurring when one is lying in the bed should any one apply a slight pushing pressure to the front of the standard. In this case the standard turns on the suspension-point or pivot-point of the bed-frame, the top of the standard turning backward and the base moving forward, the rear casters rolling on the floor, and thus facilitating the catastrophe.

The object of my invention is to cure the defect above described, and thus make the bed perfectly safe; and the device which I employ is, in the main, automatic in its action.

In the accompanying drawings, illustrating my invention, I have shown it applied to a folding bed of substantially the same general construction as that illustrated in the patent granted to Hayes, Ansley, and Eschenbrenner, Serial No. 354,911, dated December 16, 1890.

Figure 1 of the drawings is a side elevation of such a bed embodying my improvements. This view shows a part of the near extension-post broken away and the bed-frame folded into the standard. Fig. 2 is a similar side elevation showing the bed-frame pulled down and locked. This view shows a part of the near extension-post broken away to disclose the counterbalancing-spring. Figs. 3 and 4 are detail views of the locking-bar and its keeper-stud on a large scale. Fig. 3 is a face view, and Fig. 4 a section. Fig. 5 is a detail view illustrating a slightly-different construction of the locking device.

A represents the standard as a whole, and B the bed-frame as a whole.

a are the extension-posts of the standard, and a' the casters at the rear edges of the same.

The bed-frame is suspended by chains c, which play over pulleys on the inner faces of the extension-posts, and is counterbalanced by suitable springs c'. The legs b at the foot of the bed-frame may be made to fold up and unfold automatically by the well-known device illustrated in the above-mentioned patent.

All of the above features are old and well known, and I make no claim to them herein.

When the bed-frame is pulled down, as represented in Fig. 2, the standard is in somewhat unstable equilibrium, owing partly to the rolling support afforded by the casters a'. If the upper part of the standard be now pushed from the direction indicated by arrow x in Fig. 2, the casters a' will roll forward in the direction indicated by arrow y in said figure and the standard will fall backward on the bed-frame. I obviate this difficulty by providing the bed with a locking-bar C, which is pivotally attached to the extension-post of the standard at d and plays in and through a keeper e, secured to the side rail b^2 of the bed-frame B. In this bar C is formed a notch f. (Seen best in Figs. 1 and 3.) This notch is so placed on the locking-bar that when the bed-frame is pulled down said notch will engage the lower end post or stud e' of the keeper e, and thus forms with the horizontal bed-frame and vertical standard a triangular truss, of which the bar C is the oblique member. The weight of the bar C will suffice to keep the notch f in engagement with the stud e' of the keeper or some other part of the same, and when the bed is to be folded it is only necessary for the oper-

ator to raise the free end of the bar until the notch is disengaged and to hold it elevated until the bed-frame is lifted a few inches. The keeper will slide along the bar away from the notch, and the bar may be then disregarded and the bed-frame folded up.

The position of the locking-bar C when the bed-frame is folded is clearly illustrated in Fig. 1. It occupies the space between the side rail of the bed-frame and the extension-post of the standard. When the bed-frame is pulled down, the notch *f* engages the stud of the keeper automatically as soon as the frame reaches a horizontal position.

The object of the keeper *e* is merely to guide the bar and keep its free end up close to the rail b^2, and the stud *e'* forms a part of the keeper. Therefore I call the device a "keeper-stud." The shoulder *f'*, which engages the stud, is most conveniently formed by notching the bar C; but it may be formed on the bar in any known way. For example, Fig. 5 shows a simple headed stud e^2 to be driven into the side rail and a shoulder *f'* on and projecting from the edge of the bar C. In this construction the broad head of the keeper-stud serves as a keeper to guide the bar. I place the keeper-stud on the rail near the foot of the bed in order that, when the bed is down, as in Fig. 2, the free end of the bar C may be near the foot of the bed and within easy reach of the person who is folding the bed; but this arrangement is not essential.

Having thus described my invention, I claim—

1. The combination, with the standard of a folding bed, the counterbalancing-spring for the bed-frame, and the bed-frame suspended in said standard and provided with a locking-stud, of a locking-bar C, pivotally attached at one end to the standard below the level of the turned-down bed-frame and provided with a shoulder *f'*, adapted to engage said locking-stud on the bed-frame when the latter is turned down, substantially as and for the purposes set forth.

2. The combination, with the standard of a folding bed provided with casters *a'* on its extension-posts, the bed-frame suspended in its standard and provided with counterbalancing-springs and with a keeper-stud on its side rail, of the locking-rod C, pivotally attached to the standard near the bottom of the latter and engaging the keeper of said keeper-stud, said rod having a notch *f'* to engage the stud of said keeper-stud when the bed-frame is turned down, substantially as and for the purposes set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

FREDERICK ANSLEY.

Witnesses:
HENRY CONNETT,
J. D. CAPLINGER.