Sept. 13, 1949. E. E. WOLLER 2,481,965

ADJUSTABLE CRIB BOTTOM

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Fig. 1

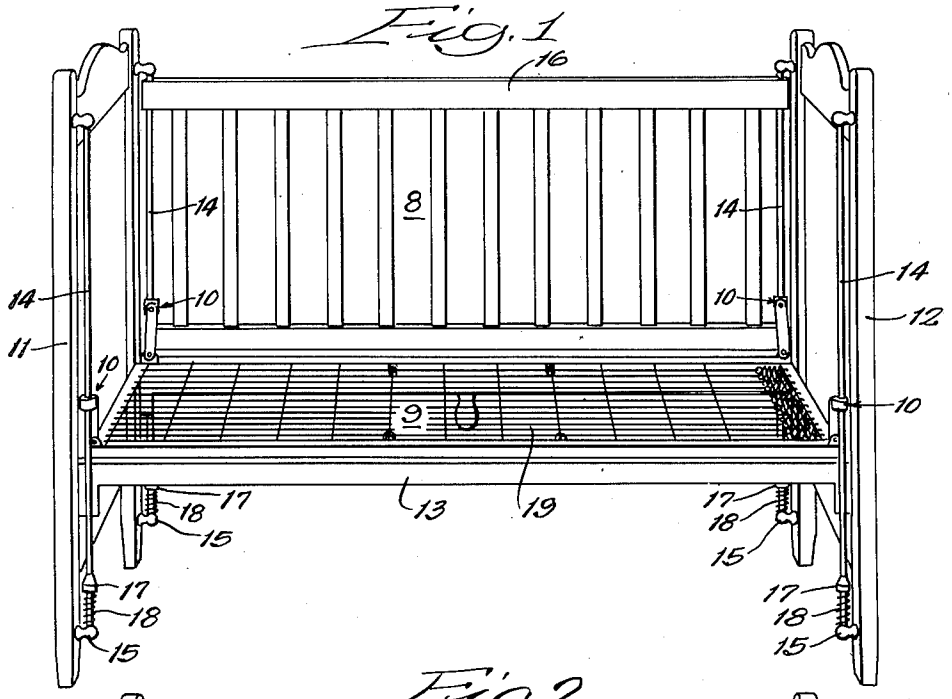
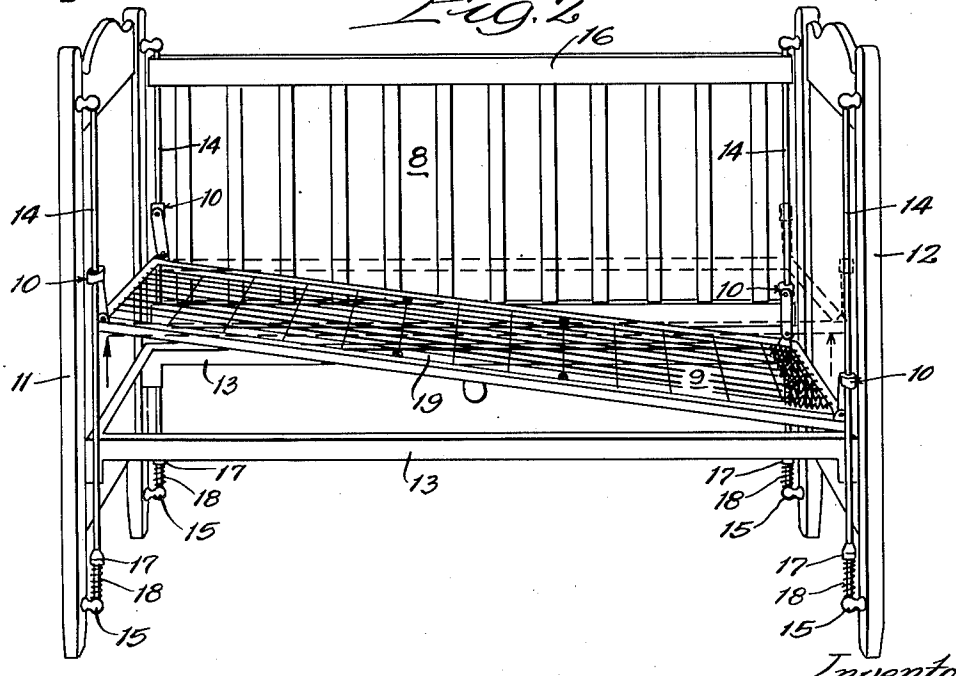


Fig. 2



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Fig. 3

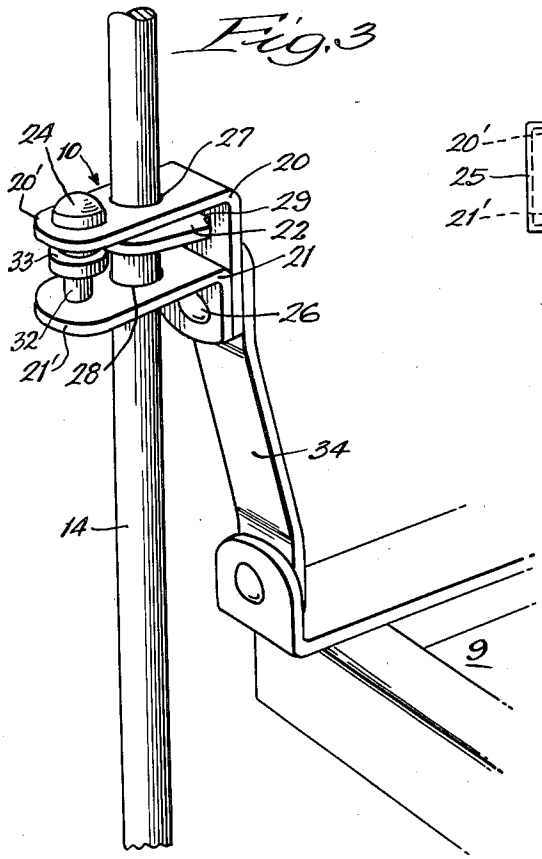


Fig. 4

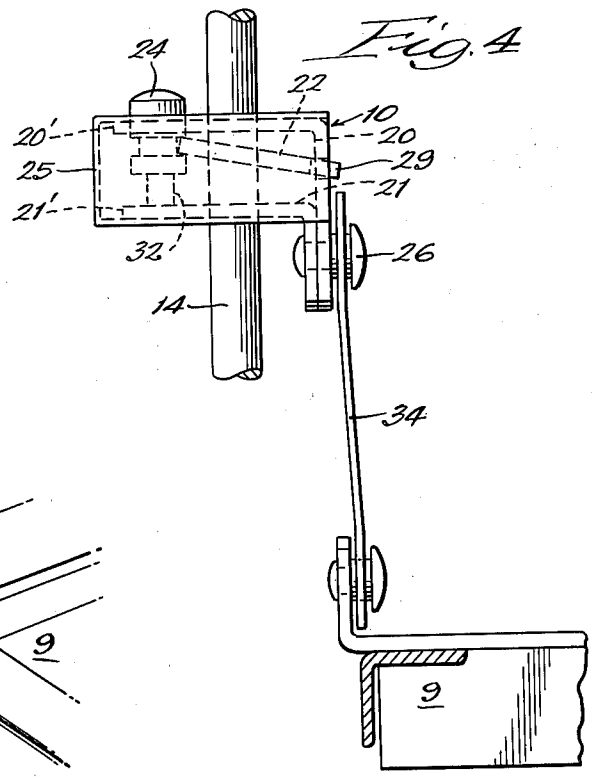


Fig. 6

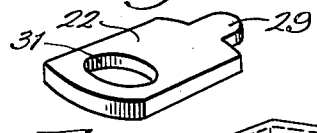


Fig. 5

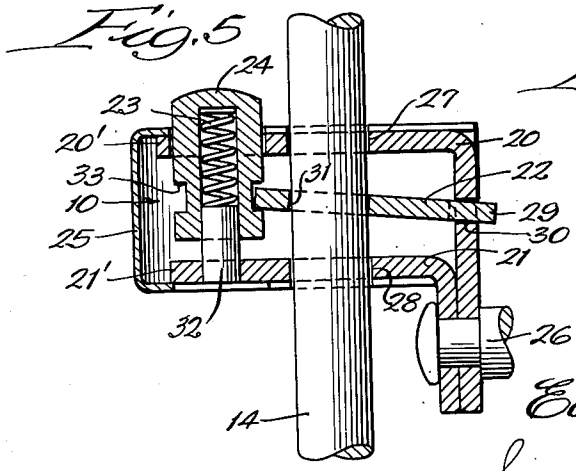
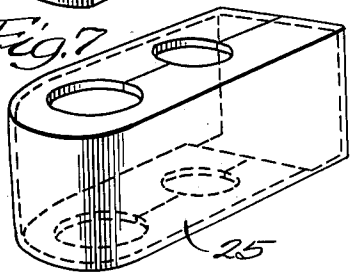


Fig. 7



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ADJUSTABLE CRIB BOTTOM

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4 Claims. (Cl. 5—11)

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The main object of this invention are, to provide a crib the bottom for which is supported on the crib frame by a plurality of improved manually-releasable automatic locking-means whereby the crib bottom may be conveniently adjusted to and locked at different levels on said frame; to provide an improved suspension of said crib bottom on said locking means permitting the crib bottom to be temporarily set at a considerable angle to the horizontal in the process of shifting the crib bottom between the extremes of its horizontal positions on the crib frame; and to provide an improved combination suspension and locking means of this kind which is simple in construction, economical to manufacture, and facile to operate.

In the accompanying drawings:

Fig. 1 is a perspective side view of a crib equipped with the improved manually-releasable automatic locking and crib-bottom suspension combination means embodying this invention whereby the crib bottom may be variously adjusted vertically with respect to the crib frame; the bed in this view has the near side removed and the crib bottom shown in its lowermost position;

Fig. 2 is a similar view but showing in full outline the crib bottom in an angular position with respect to the horizontal, being the first step in shifting the crib bottom into or out of a higher horizontal position such as indicated by dotted outlines in the figure;

Fig. 3 is an enlarged perspective of the improved manually-releasable automatic locking-means embodying this invention, the protective housing therefor being removed;

Fig. 4 is a side elevation of the same, the protective housing therefor being shown in place;

Fig. 5 is a vertical sectional detail of the locking and release mechanism;

Fig. 6 is a perspective view of the cramping ring; and

Fig. 7 is a perspective view of the protective housing for the locking mechanism.

A crib wherewith this improved manually-releasable automatic locking and crib-bottom suspension combination means embodying this invention is used comprises, a main frame 8, a crib bottom 9, and a locking and suspension combination means 10 whereby the crib bottom 9 is adjustable to and supported at different elevations on the crib frame 8.

The crib frame 8 is of a more or less conventional construction comprising ends 11 and 12 connected together by side bars 13 and having

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tracks in the form of rods 14 supported by brackets 15 on the inner faces of each of the posts of the ends 11 and 12, which rods slidably support the usual slat-formed sides 16 and the crib bottom 9. The ends 11 and 12 may be of any suitable construction. Suitable means (not shown) are provided whereby the side rails 13 are releasably held in their uppermost positions. At their lower ends the track rods 14 each support a sleeve 17 resting upon a spring 18. These serve to cushion the accidental dropping of a crib side 16 when there is a release of the crib side from its elevated position.

The crib bottom 9 herein shown is of more or less conventional design, being of angle iron construction whereon is stretched a wire fabric 19.

Each of the manually-releasable automatic locking and crib-bottom suspension means 10 comprises a pair of angle plates 20 and 21 which are secured together to provide a housing and support for a cramping ring 22, embracing a rod 14 and normally urged into cramping position by a spring 23 mounted in a release button 24, all which parts are enclosed within a cover 25 and to each of which pair of angle plates is attached by a crib-bottom suspension link 34.

As will be most obvious from Figs. 3, 4, and 5, the angle plates 20 and 21 are secured together by a rivet 26 with the arms 20' and 21' of said plates in spaced parallel relationship and with the respective apertures 27 and 28 alined with each other so as to receive the post 14.

The cramping ring 22 is of more or less conventional construction. As herein shown the ring is formed with a tongue 29 which extends through an aperture 30 in the vertical arm of the angle plate 20 whereby the cramping ring 22 is hinged between the arms 20' and 21' of the angle plates 20 and 21 with the aperture 31 of said cramping ring in axial alinement with the apertures 27 and 28 in said arms.

The release button 24 is slidably mounted on a pin or post 32 anchored near the outer end of the arm 21' of the angle plate 21. The button 24 is formed with a groove 33 and the pin 32 is so positioned that the groove 33 is adapted to receive the end of the cramping ring 22 opposite the hinged tongue 29. The spring 23, being interposed between the end of the post 32 and the upper end of the button 24, elevates the button, thereby normally positioning the cramping ring 22 for engagement with a crib-frame post 14.

The cover 25, as most clearly shown in Fig. 7, is a piece of channel-shaped spring metal bent

to form a U. The legs thereof are spaced apart slightly less than the width of the angle plates 20 and 21 so that the cover will be retained yieldingly in place as shown in Figs. 4 and 5 when it is shoved on over the arms 20' and 21' of said angle plates 20 and 21. This provides a housing protecting the cramping ring 22 and release button 24 from being accidentally released or rendered inoperative by having something inserted or caught in between the angle plates 20 and 21.

One of these manually-releasable automatic locking means 10 is arranged on each of the posts 14 and connected to the contiguous corner of the crib bottom by means of a link 34.

The positioning of these locking means 10 on the rods 14 is preferably with the release button 24 toward the outside. This makes it possible for both locking means at one end of the crib bottom 9 to be simultaneously engaged by the two hands of an individual who desires either to elevate or lower the crib bottom 9 on the rods 14. If the crib bottom is to be elevated it is only necessary to lift the locking means 10 and elevate the crib bottom to the desired position, where it will automatically be held by the engagement of the cramping ring 22 with the respective rods 14. When it is desired to lower the crib bottom 9, the hands of an individual would be placed under each of the locking means 10 at one end of the crib-bottom 9, which would position the thumbs conveniently for simultaneously depressing the corresponding buttons 24. The depression of the buttons 24 retracts the cramping rings 22 and permits the one end of the crib bottom 9 to be lowered on the crib frame 8.

The links 34 are pivoted one at each corner of the crib-bottom 9. The other end of each link is pivoted to the rivet 26 which secures a pair of angle-plates 20 and 21 in nested relationship. These links permit a slight longitudinal shifting of the crib bottom 9 relative to the frame 8 when one end of the crib bottom is shifted so as to dispose the crib bottom in an angular position with regard to the horizontal. Such longitudinal shifting prevents cramping of the locking means 10 on the rods 14 or a bowing of the rods inwardly, as would be the case if the crib bottom were connected directly to the locking means 10, without the intervention of links 34. It is this arrangement that makes it so convenient for an individual to change the level of the crib bottom 9 within the frame 8 by alternately shifting the ends relative to the horizontal.

Variations and modifications in the details of structure and arrangement of the parts may be resorted to within the spirit and coverage of the appended claims.

I claim:

1. In a crib of the class described, the combination with a rectangular frame having a vertically-disposed rod fixed at each corner thereof, of a crib bottom, a member shiftable lengthwise on each of said rods, each of said members comprising a pair of angle plates one arm of each angle plate being apertured to receive one of said rods, the plates of each pair being secured together in nested relationship with the apertured arms spaced apart and the apertures therein alined, a cramping ring hinged between said spaced arms with the aperture in said ring alined with the apertures in said arms, a spring normally urging said ring into cramping position to lock said member against downward movement on its respective rod, a button mounted on said angle plates and engaging said cramping ring and adapted to shift it against said spring so as to release the engagement of said cramping ring with said post to permit a lowering of said member on its post, and a pair of links each pivoted at one end to a corner of said crib bottom and at the other end to a pair of said nested angle plates.

2. In a crib of the class described, the combination with a rectangular frame having a vertically-disposed rod fixed at each corner thereof, of a crib bottom, a member shiftable lengthwise on each of said rods, each of said members comprising a pair of angle plates one arm of each angle plate being apertured to receive one of said rods, the plates of each pair being secured together in nested relationship with the apertured arms spaced apart and the apertures therein alined, a cramping ring hinged between said spaced arms with the aperture in said ring alined with the apertures in said arms, a button having an annular groove formed therein and slidably mounted on said spaced arms so that the end of said cramping ring opposite said hinge is received in said groove, a spring normally urging said button to shift said cramping ring into cramping engagement with said post, and a pair of links each pivoted at one end to a corner of said crib bottom and at the other end to a pair of said nested angle plates.

3. In a crib of the class described, the combination with a rectangular frame having a vertically-disposed rod fixed at each corner thereof, of a crib bottom, a member shiftable lengthwise on each of said rods, each of said members comprising a pair of angle plates one arm of each angle plate being apertured to receive one of said rods, the plates of each pair being secured together in nested relationship with the apertured arms spaced apart and the apertures therein alined, a cramping ring hinged between said spaced arms with the aperture in said ring alined with the apertures in said arms, a spring normally urging said ring into cramping position to lock said member against downward movement on its respective rod, a button mounted on said angle plates and engaging said cramping ring and adapted to shift it against said spring so as to release the engagement of said cramping ring with said post to permit a lowering of said member on its post, and a pair of links each pivoted at one end to a corner of said crib bottom and at the other end to the connection whereby a pair of said angle plates are secured together in nested relationship.

4. In a crib of the class described, the combination with a rectangular frame having a vertically-disposed rod fixed at each corner thereof, of a crib bottom, a member shiftable lengthwise on each of said rods, each of said members comprising a pair of angle plates one arm of each angle plate being apertured to receive one of said rods, the plates of each pair being secured together in nested relationship with the apertured arms spaced apart and the apertures therein alined, a cramping ring hinged between said spaced arms with the aperture in said ring alined with the apertures in said arms, a button having an annular groove formed therein and slidably mounted on said spaced arms so that the end of said cramping ring opposite said hinge is received in said groove, a spring normally urging said button to shift said cramping ring into cramping engagement with said post, a piece of

channel-shaped metal bent to form a U whereby the legs of said U are adapted to fit over the edges of said spaced apertured arms to provide a removable housing for said member, and a link pivoted at one end to a corner of said crib bottom and at the other end to a pair of said nested angle plates.

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