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J. A. TOOMEY ET AL

2,599,296

UTILITY HEIGHT ADJUSTABLE CRIB

Filed May 26, 1948

2 SHEETS—SHEET 1

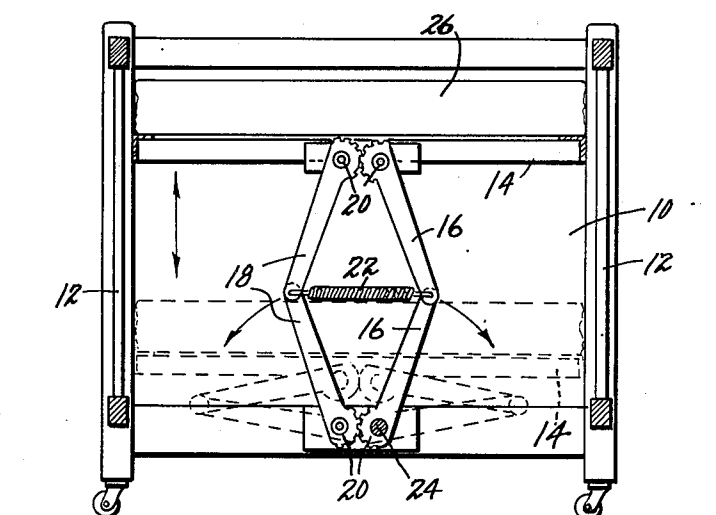


Fig. 1

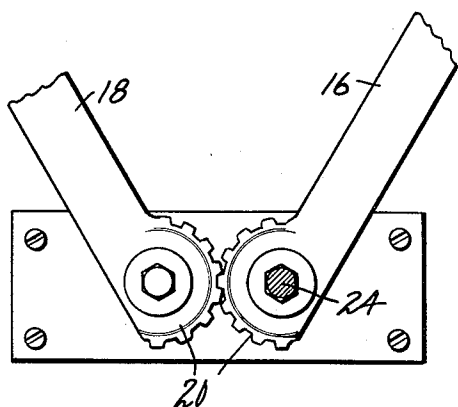


Fig. 2

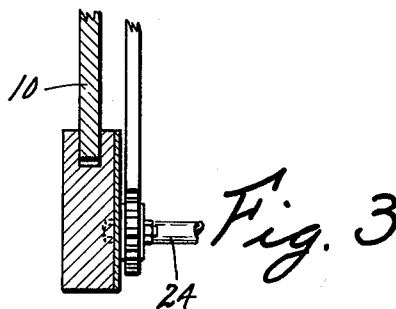


Fig. 3

INVENTORS

JOHN A. TOOMEY

CARL F. CARLSTROM

BY

Charles R. Fay.

ATTORNEYS

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2 SHEETS—SHEET 2

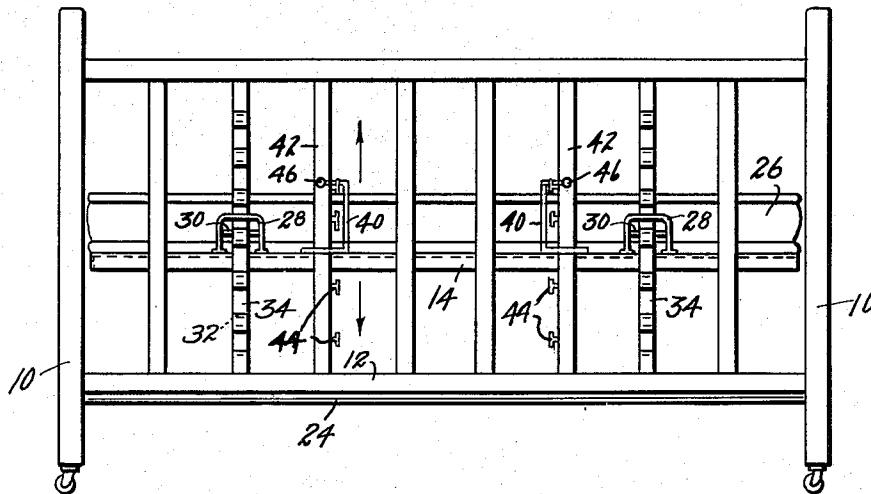


Fig. 4

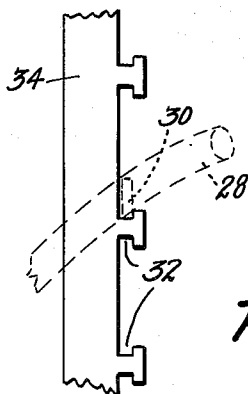


Fig. 6

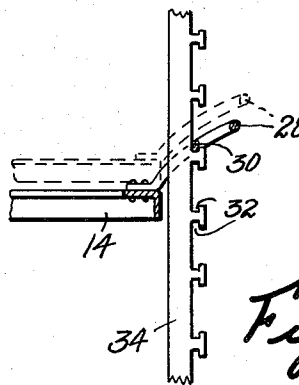


Fig. 5

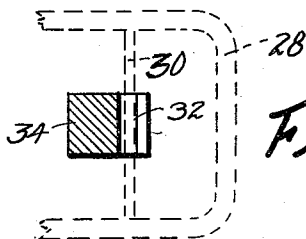


Fig. 7

INVENTORS
JOHN A. TOOMEY
CARL F. CARLSTROM
BY *Charles R. Fay,*
ATTORNEYS

UNITED STATES PATENT OFFICE

2,599,296

UTILITY HEIGHT ADJUSTABLE CRIB

John A. Toomer and Carl F. Carlstrom,
Worcester, Mass.

Application May 26, 1948, Serial No. 29,296

4 Claims. (Cl. 5-11)

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This invention relates to cribs and the principal object of the invention resides in the provision of a crib having an adjustable spring so that the same may be located in a downwardmost position within the crib, wherein the occupant may sleep or be contained safely; or adjusted upwardly by steps or from top to bottom at one step, so that the mattress on the spring will be located an inch or two below the top of the top rails of the sides of the crib, which are fixed and rigid, for use as a dressing table, etc.

Further objects of the invention include the provision of an adjustable crib as above stated in which the sides of the crib are solidly fixed providing for rigidity and strength, in combination with a crib spring which is arranged to be raised or lowered with minimum effort and including two pairs of levers at each end of the crib, said levers being geared together in pairs and provided with springs to tend to draw them together to raise the crib spring, the weight thereof being arranged to tend to separate the pairs of levers against the action of the spring, one lever at each end of the crib being connected to a corresponding lever at the other end of the crib by means of a shaft so that the levers are forced to move together to the end that the two ends of the crib spring move up and down easily and preventing tilting of the spring in the event that all the weight thereon should be disposed at one end thereof.

Another object of the invention resides in the provision of a pair of handles associated with the crib spring, said handles being adapted to be grasped simultaneously and engaged or disengaged with catch means arranged vertically so as to raise and lower the crib spring manually and locating the same at various desired steps of vertical adjustment.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which

Fig. 1 is a transverse sectional view through a crib, according to the invention;

Fig. 2 is an enlarged view illustrating the geared connection between a pair of levers;

Fig. 3 is an enlarged view illustrating one of the levers and its connection to the crib;

Fig. 4 is a view in side elevation of the crib;

Fig. 5 illustrates the locking means for the crib handles;

Fig. 6 is an enlarged view illustrating the handle of Fig. 5; and

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Fig. 7 is a top plan view of the parts shown in Fig. 6.

Reference is hereby made to copending applications, Serial No. 756,677, filed June 24, 1947; and Serial No. 770,407, filed August 25, 1947; wherein there are shown adjustable cribs analogous to the present invention but differing in many essentials which will be disclosed hereinafter.

In the present case, the crib is shown as having ends 10 which may be solid and which provide corner posts to which are secured the sides 12. The sides 12 are secured rigidly and permanently and do not drop as in the conventional crib, so that the entire crib herein is extremely stable and strong.

The reference numeral 14 indicates a crib spring which is adjustable between the dotted line position and the solid line position shown in Fig. 1. A linkage connecting the ends of the crib 10 adjacent the lower edges thereof and the ends of the crib spring 14 at each end of the crib, is shown in detail in Fig. 1, wherein there are shown levers 16 and 18 arranged in pairs and provided with heads 20 which are geared together as shown. There are two levers pivoted to each end 10 of the crib and there are two like levers pivoted at each end of the crib spring. The ends of all four levers are connected by a tension spring 22 or similar means, so as to tend to bring the pair of levers 16 toward the pair of levers 18 and thus, at the same time, to raise the crib spring 14.

One of the levers at each end of the crib is fixed to a shaft 24 so that the four levers at each end of the crib are forced to move together, whereby the two ends of the crib spring must move together and the crib spring cannot be tilted regardless of the pressure imposed thereon at either end thereof. It is also to be noted that the weight of the spring 14 and the mattress 26 together with an average weight taken of the occupant, is adapted to balance the force of the two springs so that the crib spring will tend to remain any place where it is put.

However, in order to move the spring up or down, there are provided a pair of handles 28, each of which is in the form of an inverted U, the free ends of which are secured to the crib spring 14, as is clearly shown in Fig. 5. The handles are somewhat springy and may be raised to free a locking cross bar 30 from notches 32 in a locking bar 34 arranged between the legs of the handles and in position to receive the cross bars 30 which are located forwardly

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of the bars 34. The latching notches 32 appear as opening upwardly and also as opening downwardly in the form of T's or the like, so that if the crib spring mattress and occupant tend to lower the device, the cross bar 30 is merely placed in position on top of the T selected and in the notch 32; whereas if the spring tends to overcome the weight, cross bars 34 are located underneath the T's so as to become fully latched.

If desired, roller guides may be applied to the crib spring to run in the corners or at the ends of the spring to further steady the spring in its up or down motion.

It will be seen that this invention provides an easily operated adjustable crib wherein the same may be positioned in a downwardmost position lower than the usual spring wherein the occupant is completely safe and cannot get out. At the same time, the crib itself is strong and rigid because it has no moving parts except for the spring. On the other hand, the spring is so counter-balanced as to be easily raised to the solid line position of Fig. 1, wherein it may be used as a dressing table or the like, and at this height may be at the conventional so-called utility height, found most advantageous for working.

Another form of handle is shown at 40 wherein the same are resilient and pass across the front of the bars 42 which are notched at the sides as at 44. These handles terminate in knobs 46 which are pressed toward each other to release them for adjusting the spring to a different level.

Having thus described our invention and the advantages thereof, we do not wish to be limited to the details herein disclosed otherwise than as set forth in the claims, but what we claim is:

1. A crib comprising rigid side and end walls and an adjustable mattress spring, and means to adjust the spring comprising an extensible linkage at each end of the crib, each linkage

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being connected to an end wall and to the spring, means constraining the linkages to move only together, and springs tending to extend the linkages to raise the mattress spring against the weight thereof and the occupant of the crib, handles on the mattress spring for manual movement of the latter up or down, and catches on the crib to latch the spring in adjusted position.

2. The crib of claim 1 wherein the catches selectively engage the handles, the latter being resilient and manually springable out from the catches.

3. The crib of claim 1 wherein the handles are resilient to be manually springable at right angles to the crib.

4. The crib of claim 1 wherein the catches engage the handles, the latter being resilient and springable toward each other to be released from the catches.

JOHN A. TOOMEY.
CARL F. CARLSTROM.

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