Feb. 20, 1945. W. L. LUNDIN 2,369,834

CHILD'S CRIB

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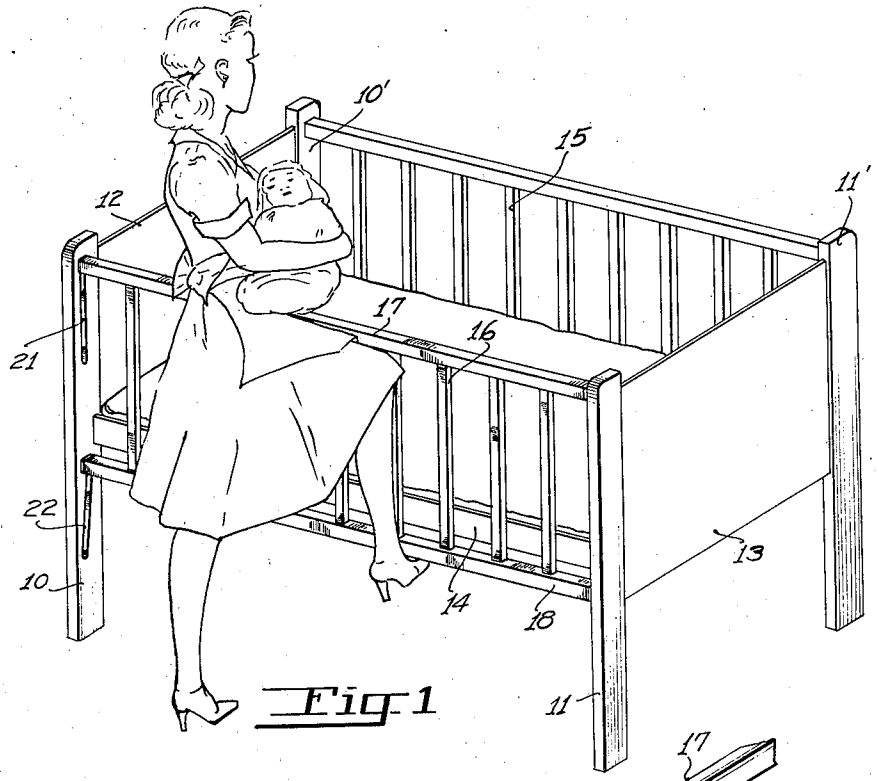


Fig. 1

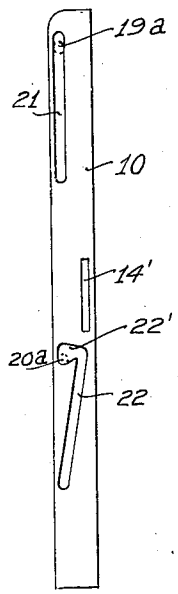


Fig. 2

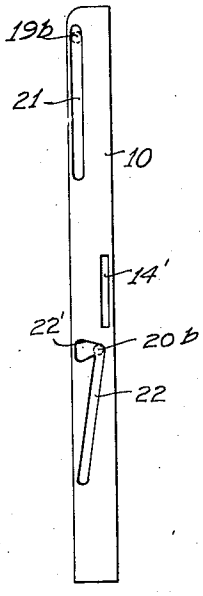


Fig. 3

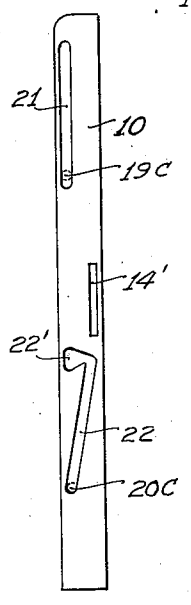


Fig. 4

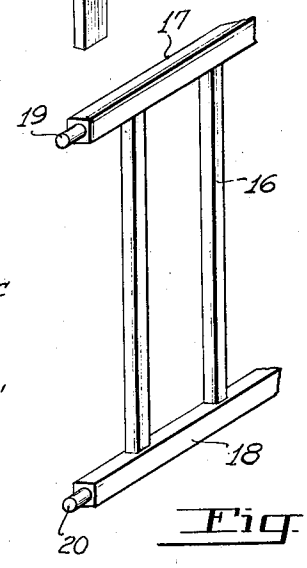


Fig. 5

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CHILD'S CRIB

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2 Claims. (Cl. 5—100)

This invention relates to baby cribs which have sides extending up above the bed in order to prevent the infant from rolling out of the crib, and this invention relates more specifically to such cribs in which either or both of the sides are arranged so that they can be let down or lowered, when desired, in order to facilitate the placing of the infant in the crib.

Most cribs of this type have the sides locked in place and are so arranged that when a side is unlocked it may be dropped into lowered position or swung out and down on hinges of one type or another. A chief difficulty with this arrangement is that the side which is to be lowered must be manually unlocked or unfastened, and consequently it is impossible to lower the side without the use of the hands. I have observed that this is a considerable inconvenience when the lowering of the side is attempted to be done by someone who is carrying an infant in the arms. In fact, with some cribs which I have seen, it is practically impossible to lower the side under such conditions until the infant has first been deposited somewhere.

The object of this invention is to provide a crib with a drop-side which is so constructed and mounted that it can be lowered from the outside of the crib by a kick of the foot, or through pressure of the foot or of the knee against the bottom of the side, without requiring any use of the hands.

Another object of this invention is to provide a drop-side for a crib of this nature which can easily be lowered from outside of the crib but which, when placed in raised position, cannot be lowered by an infant in the crib.

A further object is to construct a crib with a movable side of a very simplified construction so that the side, if desired, can be made entirely of wood without requiring any hinges, bolts, or other fastenings, or parts of metal, and also a crib in which the side can be made of metal in a one piece construction simulating wood.

These and other objects I attain by mounting the side in the crib frame in the manner hereinafter briefly described with reference to the accompanying drawing.

In the drawing:

Fig. 1 is a view, in isometric perspective of a crib having one side constructed and mounted in accordance with my invention and illustrating the manner in which the side may be lowered;

Fig. 2 is an elevation of one of the two crib posts on which the movable side is mounted, showing the slots in which the ends of the side are supported, and indicating the position of the engaging ends of the side when the side is supported in raised position;

Fig. 3 is a similar view showing the position of the engaging ends of the side when the side is about to drop into lower position;

Fig. 4 is a similar view showing the position of the ends of the side when the side has dropped to the desired lower position; and

Fig. 5 is a fragmentary perspective of one end of the movable side of the crib.

The crib illustrated in Fig. 1 has the usual supporting leg or post, 10, 11, and 10', 11' at each corner, to which are rigidly attached the end pieces, 12 and 13, at the head and foot of the bed. The legs or posts on each side are connected by a longitudinal strip 14, the ends of each fit into slots 14' and are secured therein in any suitable manner so as to form a rigid frame structure. The bed springs are supported within the frame structure in the usual manner.

In the crib illustrated only the side 16 is assumed to be movable, and the other side 15 will therefore be rigidly connected at its ends to the corresponding legs 10' and 11'.

Each of the crib sides in the form shown comprises a top horizontal rail 17 and a bottom horizontal rail 18, joined by spaced vertical connecting bars. This simple type of crib side is very popular for children's beds, and is extensively used. The top and bottom rails 17 and 18 have rounded horizontal projections or pins 19 and 20, (see Figure 5), extending from each end. The crib posts 10 and 11, on which the movable side 16 is mounted, are each formed with a pair of slots 21 and 22, the slots in the post 10 being shown in Figures 2, 3, and 4. The slots in the post 11 are not shown, but are formed to correspond to those in the leg 10.

The shape and arrangement of these slots are essential features in my invention. The upper slot 21 is located near the front edge of the post, and runs vertically. This slot is the same width throughout its extent, and its width is approximately equal to the diameter of the end pin 19 of the upper rail 17, so that the pin can slide up and down freely in the slot, but will be held by the slot against transverse movement.

The main portion of the lower slot 22 corresponds in size and shape with the upper slot 21, but preferably extends upwards in a slightly oblique direction so that only its lower end will be in vertical alignment with the upper slot. At its upper end the slot 22 has an enlarged locking-notch portion 22' extending towards the

forward edge of the post, as shown in Figures 2, 3, and 4. The bottom of this notch slopes downwardly from its junction with the main slot thus causing the notch to broaden out at its forward extremity.

The arrangement of the upper and lower slots 21 and 22 in each of the posts 10 and 11 is such that when the crib side 16 is in the raised position, shown in Figure 1, the end pins 19 and 20 of the top and bottom rails will be in the locations indicated by 19a and 20a respectively in Figure 2.

When the crib side is to be lowered the side must be raised slightly and the bottom of the side pushed inwardly towards the bed until the pin 20 at each end of the bottom rail occupies the position indicated at 20b in Figure 3. The pin 19 will then be at the upper extremity of the upper slot in the position indicated by 19b. When the side is in this position it will then drop by gravity to the lowered position, and the pins 19 and 20 will then occupy the positions indicated at 19c and 20c in Figure 4.

Moving the side from the position indicated in Fig. 2, to that indicated in Fig. 3, may be done by giving the bottom rail a slight kick, as illustrated in Fig. 1, which will serve both to lift the rail, and to move it inwardly. This same movement of the bottom of the side may also be accomplished, if preferred, merely by pressing against the bottom rail with the knee, or with the side of the leg, the pressure causing the end pins 20 to slip upwardly along the bottom of the notch 22' until they reach the position shown in Fig. 3. In either case any necessity of taking hold of the crib side by the hands, in order to lower the side, is avoided. The convenience of thus being able to lower the side without being required to use the hands will be apparent.

When the infant is in the crib and the side has been raised there is no danger that the infant will be able to lower the side by grabbing hold of the side and attempting to shake it. Since the bottom rail of the side is located a considerable distance below the bed the infant is unable to take hold near the bottom of the side.

Many variations in the construction of the crib and of the sides are possible within the scope of my invention, and the simple crib construction which I have shown is merely an illustration of one method of carrying out my invention. It would be possible to make the sides of the crib in the form of solid panels, placing pins in the ends for engaging the slots in the posts. If the crib and sides are to be made entirely of metal a small bumper of rubber or other resilient material should preferably be placed in the lower end of each of the slots 22 so as to cushion the shock when the side is dropped into lower position. This is not necessary however, when the crib side is made entirely of wood. Under present conditions I have found it preferable to make the crib entirely of wood and in so doing I achieve a special advantage in that all use of metal is avoided. One of the features of my invention is the fact that no hinges or locks are required for the sides, and thus when wood is used for constructing the crib a considerable economy in cost is possible.

Both sides of the crib may be similarly mounted for lowering if desired. In each case however, it is essential that the upper locking-notch portion of the lower slots should extend towards the outside of the crib, so that pressure from the outside towards the inside of the crib, and not the reverse, is necessary for moving the side into such position that will drop in the slots.

I claim:

1. In a crib of the character described, a pair of corner posts, a movable crib side supported between said posts, a pair of slots in each of said posts located one above the other, a pair of horizontal projections in each end of said side extending into said slots respectively, said lower slots having locking-notch portions at their upper extremities extending towards the front edges of said posts, said locking-notches adapted to engage the lower horizontal projections of said side when said side is in raised position and thereby to hold said side in raised position but permitting said lower horizontal projections to be disengaged from said locking-notches when the lower portion of said side in raised position is moved slightly upwardly and inwardly, whence said side will drop into lowered position, the bottoms of said locking-notch portions sloping obliquely downwardly and forwardly from the tops of said lower slots towards the front edges of said posts, whereby said side can be moved from raised to lowered position by applying pressure inwardly against the lower portion of said side causing said lower horizontal projections to slide upwardly and inwardly along said bottoms of said locking-notch portions until disengaged therefrom and without necessitating any manual lifting of said side.

2. In a crib of the character described, a pair of corner posts, a movable crib side supported between said posts, a pair of slots in each of said posts located one above the other, a pair of horizontal projections in each end of said side extending into said slots respectively, said upper slots extending substantially vertically and located near the front edges of said posts respectively, said lower slots having enlarged locking-notch portions at their upper extremities extending towards the front edges of said posts, said locking-notches adapted to engage the lower horizontal projections of said side when said side is in raised position and thereby to hold said side in raised position but permitting said lower horizontal projections to be disengaged from said locking-notches when the lower portion of said side in raised position is moved slightly upwardly and inwardly, whence said side will drop into lowered position, the bottoms of said locking-notch portions sloping obliquely downwardly and forwardly from the tops of said lower slots towards the front edges of said posts, whereby said side can be moved from raised to lowered position by applying pressure inwardly against the lower portion of said side causing said lower horizontal projections to slide upwardly and inwardly along said bottoms of said locking-notch portions until disengaged therefrom and without necessitating any manual lifting of said side, the lower extremities of said bottom slots and the extremities of said locking-notches being in substantial vertical alignment with said upper slots thus causing said side to be held substantially vertically when said side is in raised or lowered position.

WALFRED L. LUNDIN.