This invention relates to baby cribs and particularly to a crib construction which facilitates the handling of the child from early infancy and particularly from the time he is able to walk.

Such cribs as are now made have relatively high side railings over which the child must be lifted bodily when placing him in or removing him from the crib. When the child has reached a walking age he is frequently so heavy that it is a severe strain on the mother to raise him the necessary distance.

The principal object of my invention therefore is to eliminate this lifting by providing the crib with a passage opening extending from top to bottom of one side railing intermediate its ends, and a step ladder leading to the bottom level of this opening, and arranged so that in use to close the same. The ladder then forms a part of the side railing so that the child cannot crawl or fall out.

A further object is to provide a catch or holding means for the ladder, adapted to function when the ladder is in a raised or passage closing position, which while extremely simple requires both a raising and an inward movement of the ladder to engage or release. In this manner there is little possibility of the child being able to release the catch by himself when in the crib.

I have also mounted the ladder so that it may be slid along and held clear of the floor to one side of the opening. This leaves the opening exposed without any obstruction on the floor adjacent the crib and facilitates the work of the mother or nurse in arranging the covers or attending to the wants of the reclining child, since the opening is sufficiently wide to enable her to easily reach through the same instead of over the top of the side railing.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views:

Figure 1 is a perspective view of the crib with the ladder lowered and in operative position.

Figure 2 is a similar view showing the ladder raised.

Figure 3 is an enlarged fragmentary transverse section showing the ladder raised and before the catch elements are engaged.

Figure 4 is a similar view showing the ladder pressed in at the bottom and further raised to place the catch elements in vertical alignment.

Figure 5 is a similar view showing the position of the ladder when the catch elements are finally engaged.

Figure 6 is a fragmentary top plan view showing the cooperating catch or holding elements on the top rails of the ladder and crib.

Referring now more particularly to the characters of reference on the drawings, the crib in general is of standard form and construction, comprising corner posts and legs 1, bottom rails 2 secured to the posts intermediate the ends and forming a support for the springs and mattress, indicated at 3, and top rails 4 also secured to the posts. Vertical bars 5 or the like extend between and connect the top and bottom rails to form the crib enclosing railings.

In utilizing a structure as above described for the purposes of my invention, I cut away a portion of one of the top bars 4 of the corresponding side railing intermediate its ends and between certain of the vertical bars 5, and remove the intervening bars to leave a rectangular opening 6. This opening extends down to the bottom rail 2 and is of sufficient width to permit the free passage of a child therethrough. The ordinary bars 5 at the sides of this opening are preferably replaced by somewhat heavier bars 5a. The ladder, to close the opening or to extend to the floor from the bottom rail 2 at an outward angle, comprises side rails 7 to fit between the bars 5a, steps 8 between these rails which are horizontally disposed when the ladder is in a depending position, and an end rail or bar 9 which is at the bottom of the ladder when the latter is in its depending position and at the top when the ladder is in position to close the opening 6.

The rail 9 is of the same cross sectional size and shape as the top rail 4 of the crib so as to match therewith and give the same a continuous unbroken appearance between its cut ends when the ladder is in its raised position. Lugs 10 project lengthwise from the ends of the rail 9 to fit sockets 11 cut in the adjacent ends of the rail 4 and open to the top of the same. Plates 12 are secured on the front of the rail 9 at its ends and extend beyond the same, so as to engage the front face of the rail 4 and limit the rearward movement of the rail 9 relative thereto before the lugs engage the sockets and thus line the same up vertically.

Projecting lengthwise of the ladder from the ends of the rails 7 nearest the crib rail 2 are rigid
hanger elements 13 having closed slots 14 in their end portion. A rod 15 slidably projects through the slots, said rod extending parallel to and slightly below the rail 2 for the length of the opening and being secured at its ends on said rail 2 in any suitable manner. This rod extends some distance beyond the opening and this extending portion which is also parallel to the rail 2 is bent near the opening so as to be further out from said rail than the remainder of the rod as plainly shown in Figures 1 and 2. The purpose of this will be shown later.

The slots 14 are of L shape form and are relatively inverted when the ladder is raised so that their horizontal portions then project inward relative to the crib from their vertical portions as shown in Figure 3. The rod 15 is normally disposed at the inner end of the horizontal portion of the slots, and is yieldably held in such position by a flat spring 16 secured to and depending from the adjacent step of the ladder and engaging the rod in front. This horizontal portion of the slot is also so positioned relative to the length of the ladder that when the latter is raised, and said rod is in said horizontal position, the crib and ladder rails 4 and 9 respectively are horizontally aligned, as shown in Figure 3. These rails cannot yet become longitudinally aligned however since the lugs 16 are abut against the outer face of the rail 4 and prevent the necessary inward movement of the rail 9 into place. The length of the vertical portion of the slots 14 however is such that when the rod 15 is at the bottom of such portion, the lugs 16 will clear the top of the rail 4, as shown in Figure 4.

In operation therefore to manipulate the ladder so that its top rail may be aligned and engaged with the rail 4, it is pressed in at the bottom after it has been turned to a vertical position and against the resistance of the spring 16 (preferably by the knee) until the outer vertical portion of the slots 14 engage the rod. The ladder may then be raised so that the lugs 10 clear the top of the rail 4, after which the rail 9 is shifted inwardly so as to align with the rail 4. Such inward movement is limited by the plate 12 with the rail 4 so that upon lowering the ladder the lugs 10 align with and enter the sockets 11. When the ladder is fully lowered into place, the rod 15 will be again disposed at the upper end of the vertical portion of the slots 14, and the spring 16 then acts to shift the bottom of the ladder outwardly or so that said rod is again disposed at the inner end of the horizontal portion of the slots. To release the rail 9 from the rail 4 it is necessary to again shift the lower end of the ladder inwardly so that it can be raised to disengage the catch lugs from their sockets.

If it is desired to use the opening 6 without having the ladder extending to the floor, it is released from its closed position as above described and slid along the crib on the outside to a point beyond the opening while still maintaining the ladder in an inverted or vertical position. The extended portion of the supporting rod 15 being disposed further out from the crib than the remainder enables the ladder to be thus shifted without interfering with the side railing of the crib, as indicated in Figure 5. The rail 9 is then in the horizontal plane of the rail 4 transversely of the crib but is outwardly of the same. The ladder may then be releasably maintained in such position by suitable catch means such as cooperating snap catch elements 11 of the glove fastener type.

It is to be noted that cribs are usually constructed with one side railing mounted for limited vertical movement while the other side railing is fixed. While I have here shown my ladder device as betwixt a crib on the fixed railing, it is immediately material in practice on which of the two railings it is mounted, as will be obvious.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

1. In a baby crib having side railings one of which is cut away intermediate its ends from top to bottom to provide a passage opening, a step ladder substantially the width of the opening, a rod mounted on the crib below and extending lengthwise of the opening to a termination beyond one side of the same a distance not less than the width of the ladder and hanger elements on the normally upper end of the ladder turnably and slidably engaging the rod; that portion of the rod which extends along the opening being disposed so that the ladder when raised will fit within the opening, and that portion of the rod which extends beyond the opening being disposed so that the ladder when raised and slid along and onto said last named portion will lie outwardly of but adjacent the side railing of the crib.

2. In a baby crib having side railings one of which is cut away intermediate its ends from top to bottom to provide a passage opening, a step ladder substantially the width of the opening, said railing having a top rail removed across the opening, means turnably mounting the normally upper end of the ladder on the crib adjacent and below the opening so that said ladder may be remived from a depending position to a vertical position in the opening, and a rail on the then upper end of the ladder to fit between and align both transversely and vertically with the top rail portions of the side railing.

3. A structure as in claim 2 with releasable catch means between said top rail and the ladder rail.

4. A structure as in claim 2, with releasable catch means between said top rail and the ladder rail, and means formed with the catch means and the ladder mounting means to prevent releasing of the catch means unless the ladder is moved inwardly at its mounted end and raised while thus held moved.

5. A structure as in claim 2, with releasable catch means between said top rail and the ladder rail, means formed with the catch means and the ladder mounting means to prevent releasing of the catch means unless the ladder is moved inwardly at its mounted end and raised while thus held moved, and means yieldably resisting the side railing of the crib.

6. In a baby crib having side railings one of which is cut away intermediate its ends from top to bottom to provide a passage opening, a step ladder substantially the width of the opening, said railing having a top rail removed across the opening, means turnably mounting the normally upper end of the ladder on the crib adjacent.
and below the opening so that said ladder may be raised from a depending position to a vertical position in the opening, said mounting means comprising hanger elements projecting from said end of the ladder having L shaped slots there-in, a rod mounted on the crib parallel to said side railing thereof and projecting through the slots and on which the hanger elements are turnable, lugs projecting laterally from the then upper end of the ladder, the adjacent ends of the top rail sections having sockets cut down from the top to receive the lugs; the slots being inverted when the ladder is raised and the horizontal portions projecting inwardly of the crib, and means yieldably maintaining the inner end of the horizontal slot portions against the rod; the distance from the rod to the lugs when said rod is thus disposed being the same as that from said rod to the sockets whereby to engage the lugs in the sockets from the top, the ladder must be raised.

7. A structure as in claim 6, with guide plates fixed on the ladder outwardly of the lugs to engage the sides of the top rail when the ladder is raised sufficiently for the lugs to clear said rail, so as to align the lugs with the sockets in a vertical plane.

8. In combination, a baby crib having side railings, one of which is cut away intermediate its ends from top to bottom to provide a passage opening, a step ladder substantially the width and height of the opening, means mounting the ladder on the crib so that said ladder may be selectively moved to depend from the opening or raised to form a closure for the same, said mounting means comprising a fixed rod extending lengthwise of the crib below the opening and elements on the normally upper end of the ladder having slots extending lengthwise of the ladder and through which the rod projects, lugs projecting lengthwise of the crib from the opposite end of the ladder and disposed above the top of the crib railing when the ladder is raised to a closure forming position and the bottom of the slots engage the rod, the said railing having sockets cut down from the top to receive said lugs, and guide elements on the ladder adjacent its then upper end to engage the railing on the outside and locate the lugs in vertical alignment with the sockets.

9. In combination, a baby crib having side railings one of which is cut away intermediate its ends from top to bottom to provide a passage opening, a step ladder substantially the height and width of the opening, means mounting the ladder on the crib so that said ladder may be selectively moved to depend from the opening or raised to form a closure for the same releasable catch means between the railing and ladder arranged to function when the latter is raised to a closure forming position, and means included with the ladder mounting means to prevent release of the catch means unless the ladder is both moved inwardly at its mounted end and raised while thus held moved.

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