

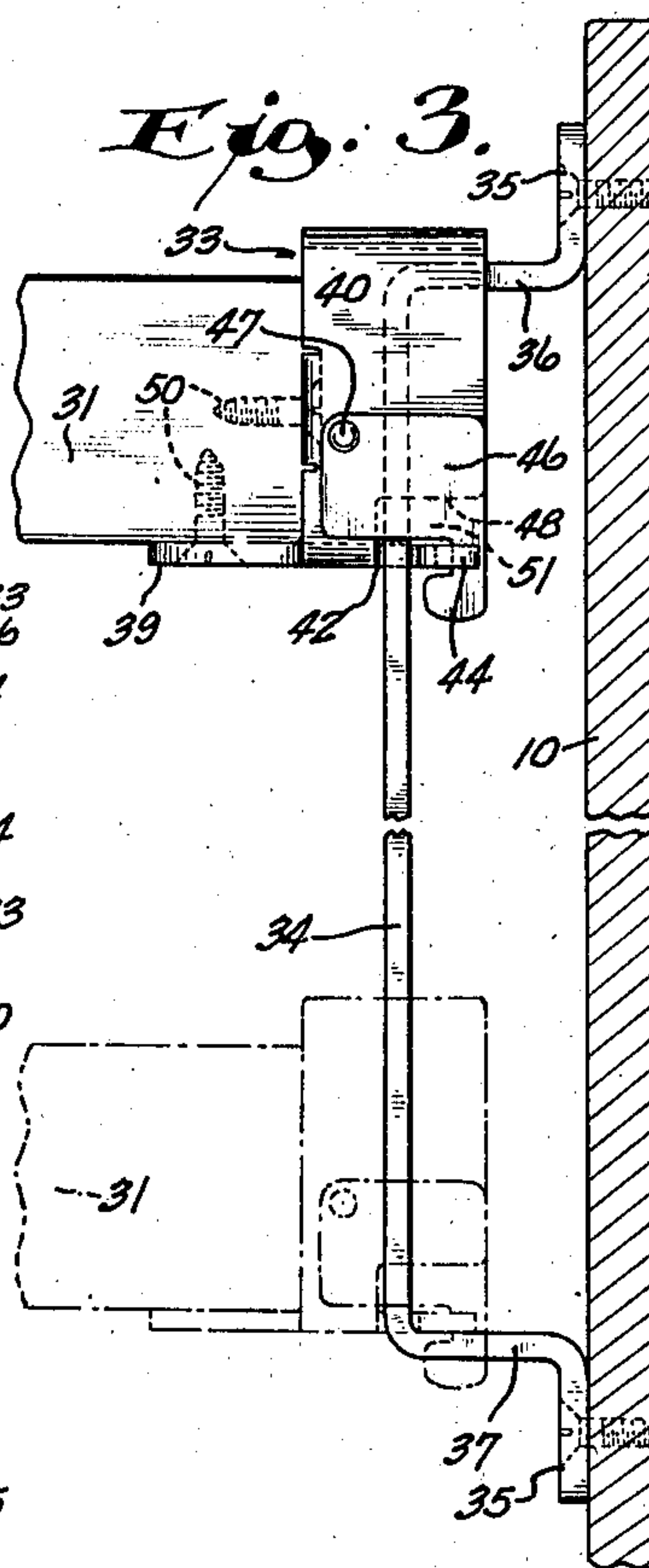
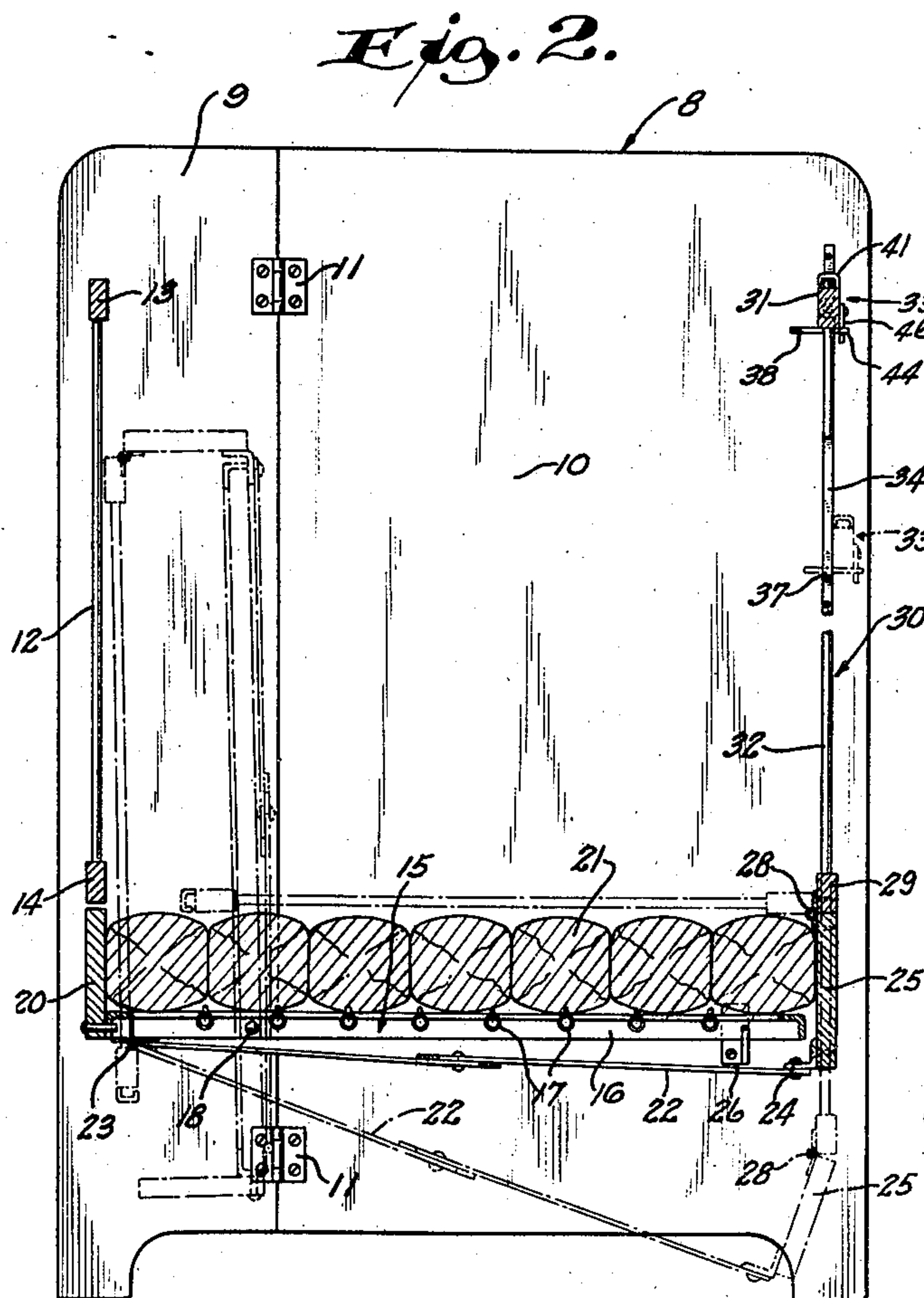
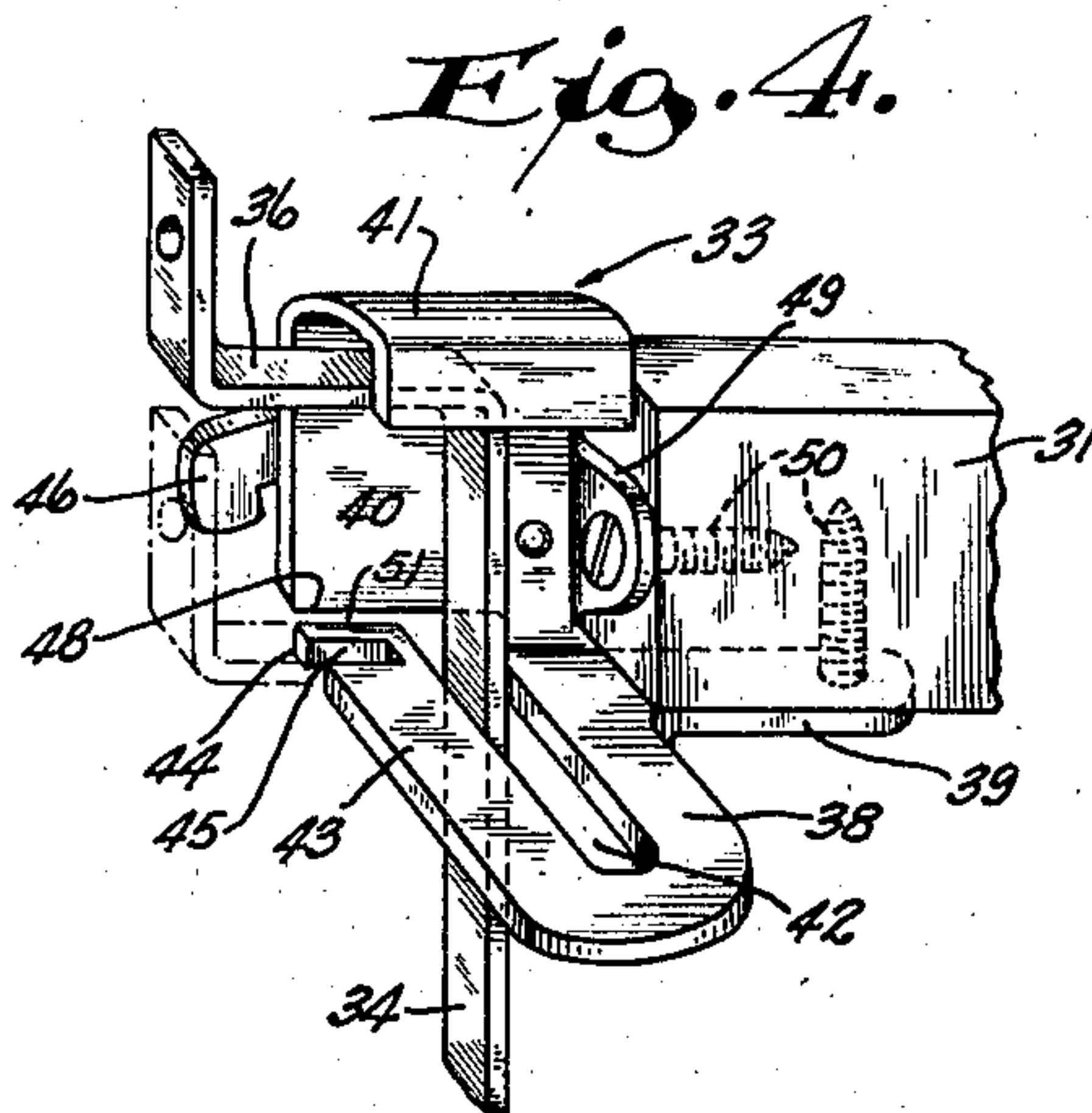
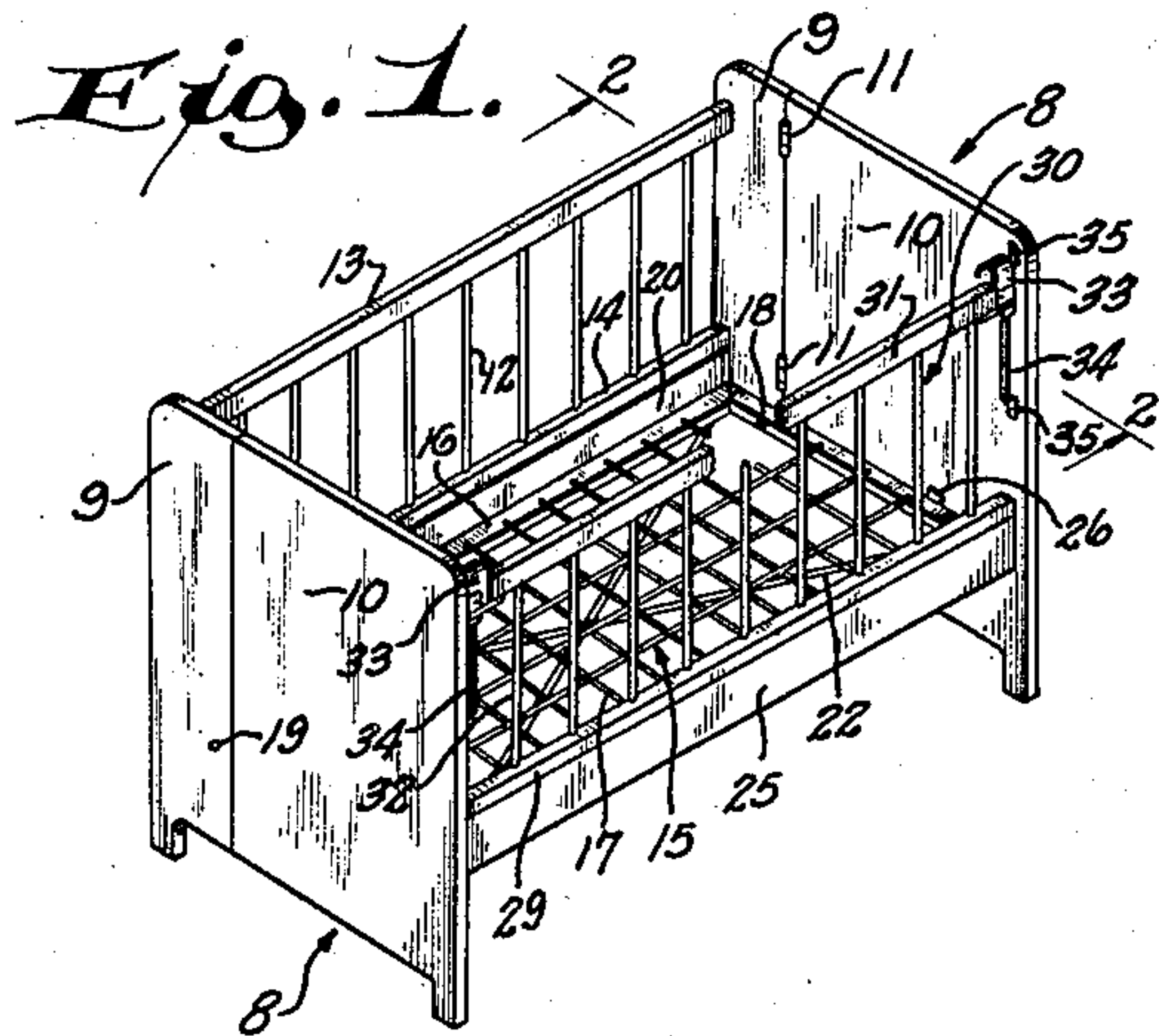
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2,430,704

FOLDING CRIB

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# UNITED STATES PATENT OFFICE

2,430,704

## FOLDING CRIB

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3 Claims. (Cl. 5—99)

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This invention relates to improvements in folding cribs.

It is one of the objects of this invention to provide an improved folding crib which may be readily collapsed to a convenient size to facilitate transportation thereof, and also to render it capable of being stored in a relatively small space when not in use.

A further object of this invention is to provide a folding crib in which the major parts are movable to a position parallel to one another.

It is a further object of this invention to provide a folding crib in which all parts are held rigidly when in assembled position.

In my prior Patent No. 1,846,673 a folding crib is disclosed wherein one of the side members forms the usual vertically movable gate, and wherein the opposite side member is movable to a position close to the first mentioned side to permit collapse of the ends.

The present invention is an improvement over the construction shown in said prior patent in that one side member is fixed and the opposite side member is constructed and supported in a novel manner so that the latter is not only movable in a vertical direction to serve as a gate in use, but is also hingedly movable to a position to facilitate collapse.

It is, therefore, a further object of the present invention to provide an improved arrangement as above described including novel latch mechanism for the movable side, said mechanism serving to releasably maintain the side against collapsing movement, and also serving to releasably maintain the side in a selected high or low position of vertical adjustment.

With the above and other objects in view, the invention consists of the improvements in folding cribs and all its parts and combinations as set forth in the claims and all equivalents thereof.

In the accompanying drawings illustrating one complete embodiment of the preferred form of the invention in which the same reference numerals designate the same parts in all of the views.

Fig. 1 is a perspective view of the crib in assembled condition;

Fig. 2 is a sectional view on an enlarged scale taken on the line 2—2 of Fig. 1;

Fig. 3 is a fragmentary vertical sectional view through one of the ends showing the latch mechanism in front elevation, the dot and dash lines indicating the position of the latch when the side is in a lowered position; and

Fig. 4 is a fragmentary perspective view illus-

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trating the inner side of the latch, the dot and dash lines showing the relative position of the parts prior to swinging the side down to collapsed position.

Referring more particularly to the drawing, the crib includes a pair of end members 8 each comprising a fixed section 9 and a foldable section 10. Each foldable section 10 is connected to its fixed section 9 by hinges 11 which permit movement of the foldable section from the position of Fig. 2 to a position at right angles to the fixed section 9 and toward the interior of the crib. A fixed side member 12 has the ends of its rails 13 and 14 secured to the fixed end sections 9.

A bottom member 15 includes an outer angle iron frame 16 for supporting elongated spring members 17. The frame 16 has one of its ends pivotally connected to the fixed section 9 of one of the end members as at 18 and has its other end similarly pivoted to the opposite fixed section 9 as at 19. The bottom member is therefore swingable from the full line horizontal position of Fig. 2 to the dot and dash line vertical position shown therein.

Secured to one of the long sides of the frame 16 and extending below the side rail 14 is a side strip 20. This strip is movable with the frame 16 when the latter is swung to the collapsed position and serves to prevent the mattress 21 from falling downwardly when the parts are in the dot and dash line position of Fig. 2.

An X-frame 22 has its inner ends hingedly connected as at 23 to the lower side of the frame 16. The opposite ends of the X-frame are connected to angles 24 and the latter are in turn secured to a sideboard 25. The arrangement is such that the X-frame 22 may be swung on the hinges 23 from the full line position of Fig. 2 to the dot and dash line position therein to cause lowering of the sideboard 25. During such swinging movement the spring frame 16 remains in its full line position where it is suitably supported on brackets 26 secured to the end sections 10. Said frame 16 has its end angle portions releasably engageable with the brackets 26.

Hingedly connected as at 28 to the upper edge of the sideboard 25 is the lower rail 29 of the movable side member 30. The side member 30 also includes an upper rail 31 which is connected by vertical rods 32 with the lower rail.

Secured to each end of the upper rail 31 is a latch member 33. Aside from having a right and left hand construction the latch members 33 are identical. These latch members cooperate with vertical elongated guiding members 34 which are



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secured to the foldable sections 10 of the end members as at 35. Each elongated guiding member 34 has an upper horizontal offset 36 and a lower horizontal offset 37.

The latches 33 are of novel construction and are arranged to cooperate with the members 34 to releasably maintain the side member 30 in an upright position and to maintain the same in either the high position illustrated by full lines in Fig. 2 or the low position illustrated by dot and dash lines. Each latch comprises a base portion 38 having a projecting fastening lug 39, an upright portion 40 bent upwardly at right angles from the base portion, and a top portion 41 which is in the form of an inverted channel and which projects inwardly of the crib from the upright portion 40. The base portion 38 has a longitudinal slot 42 and one of the legs 43 of the base portion is free at its forward end and projects forwardly as at 44. The forwardly projecting end is notched as at 45 for cooperation with a locking plate 46, which is pivoted as at 47 to the outer side of the upright portion 40. Above the free end of the leg 43 the upright portion is cut out as at 48 to provide a space through which the offset portion 36 of the guiding member 34 may be withdrawn when the locking plate 46 is in the open position of Fig. 4 and when the parts are in the relative positions shown by the dot and dash lines in Fig. 4.

The upright portion 40 is provided with a fastening lug 49 so that the latch members may be permanently connected to the ends of the rail 31 by the use of screws 50 as shown in Fig. 4.

During use of the assembled crib the locking plates 46 will normally be in the closed position of Fig. 3 to lock the rail to the guiding members 34, the latter being received in the slots 42. The channel-shaped top portion 41 of each latch will be supported on the upper offsets 36 as shown in Figs. 1 and 3 to maintain the crib side member 30 in an elevated or high position. If it is desired to lower the side 30 a slight upward pull on the top rail 31 will disengage the channels 41 from the offsets 36. The rail is then pulled forwardly toward the operator and this latter movement is permitted by the length of the slots 42. When the latches have been pulled forwardly sufficiently to clear the offsets 36 then the latches will slide downwardly on the elongated guiding members 34 as shown by the dot and dash lines in Figs. 2 and 3 until the base portions 38 of the latches engage the bottom offsets 37.

During such downward movement the X-frame 22 will pivot to the dot and dash position of Fig. 2 carrying with it the sideboard 25 and side member 30. To return the side member 30 to the high position the reverse of the above operation is carried out.

If it is desired to collapse the crib then both of the plates 46 on the latches 33 are swung to the open position of Fig. 4 on the pivots 47. This exposes the horizontal slots 51 below the cut out portions 48 so that when the rail 31 is pulled upwardly to bring the bases 38 of the latches into contact with the under sides of the offsets 36, (as illustrated by dot and dash lines in Fig. 4), then by pushing inwardly on the rail 31 the offsets 36 will pass through the slots 51. This permits a swinging of the side member 30 on the hinges 28 from the full line position of Fig. 2 to the dot and dash line position therein. After the side member 30 has thus been swung into parallelism with the mattress and bottom frame, then the bottom frame 16 is pulled upwardly to

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free it from the end brackets 26 and is swung on the pivots 18 and 19 to the upright dot and dash line position shown in Fig. 2. Then by swinging the foldable sections 10 of the end members inwardly on the hinges 11 the entire crib is collapsed into very compact form.

Various changes and modifications may be made without departing from the spirit of the invention and all of such changes are contemplated as may come within the scope of the claims.

What I claim is:

1. A folding crib comprising an upright side member, a pair of end members each formed of a section fixed to said side member and a section hinged to the fixed section, an elongated vertical guiding member secured to each foldable end member section near the outer side edge thereof, a bottom member pivoted at its ends to said fixed sections of the end members for movement from a horizontal position to a vertical position between said fixed end member sections, a frame hinged on one of its sides to said bottom member and having its other side swingable below the bottom member from a raised position near the bottom member to a lowered position, a normally upright crib side member hingedly connected at its lower edge along a horizontal hinge line to the swingable side of said frame and movable therewith, said hinge connection providing for folding movement of said side member over upon said bottom member, in parallelism therewith and above the same, when said frame and side member are in raised position on the side member having portions slidably engaging said elongated vertical guiding members to maintain said side member in upright position and said vertical guiding members having horizontal end portions and said latching devices including hook portions detachably engaging one or the other of said horizontal end portions for releasably holding said side member in raised upright position.
2. A folding crib comprising an upright side member, a pair of end members each formed of a section fixed to said side member and a section hinged to the fixed section, an elongated vertical guiding member having lateral offsets secured to each foldable end member section near the outer side edge thereof, a bottom member pivoted at its ends to said fixed sections of the end members for movement from a horizontal position to a vertical position between said fixed end member sections, a frame hinged on one of its sides to said bottom member and having its other side swingable below the bottom member from a raised position near the bottom member to a lowered position, a normally upright crib side member hingedly connected at its lower edge along a horizontal hinge line to the swingable side of said frame and movable therewith, said hinge connection providing for folding movement of said side member over upon said bottom member, in parallelism therewith and above the same, when said frame and side member are in raised position, and latching devices on the side member having portions slidably engaging said elongated vertical guiding members to maintain the side member in upright position, said vertical guiding members having horizontal end portions and said latching devices including hook portions detachably engaging one or the other of said horizontal end portions for releasably holding said side member in raised upright position, said latching devices being vertically mov-



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able on said elongated guiding members from the raised to the lowered position.

3. A folding crib comprising an upright side member, a pair of end members each formed of a section fixed to said side member and a section hinged to the fixed section, a bottom member pivoted at its ends to said fixed sections of the end members for movement from a horizontal position to a vertical position between said fixed end member sections, a frame hinged on one of its sides to said bottom member and having its opposite side swingable below the bottom member from a raised position near the bottom member to a lowered position, a horizontally extending sideboard supported on the swingable side of said hinged frame and projecting above the crib bottom member a distance substantially equal to the thickness of a mattress, a normally upright crib side member having its lower edge hinged to the upper edge of said sideboard to permit folding movement of said crib side member into parallelism with the crib bottom member, and latching means on said side member and hinged end

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member section cooperable to releasably maintain said crib side member in upright position and in a selected raised or lowered upright position.

AMBROSE M. BROWN.

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The following references are of record in the file of this patent:

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