

Aug. 31, 1943.

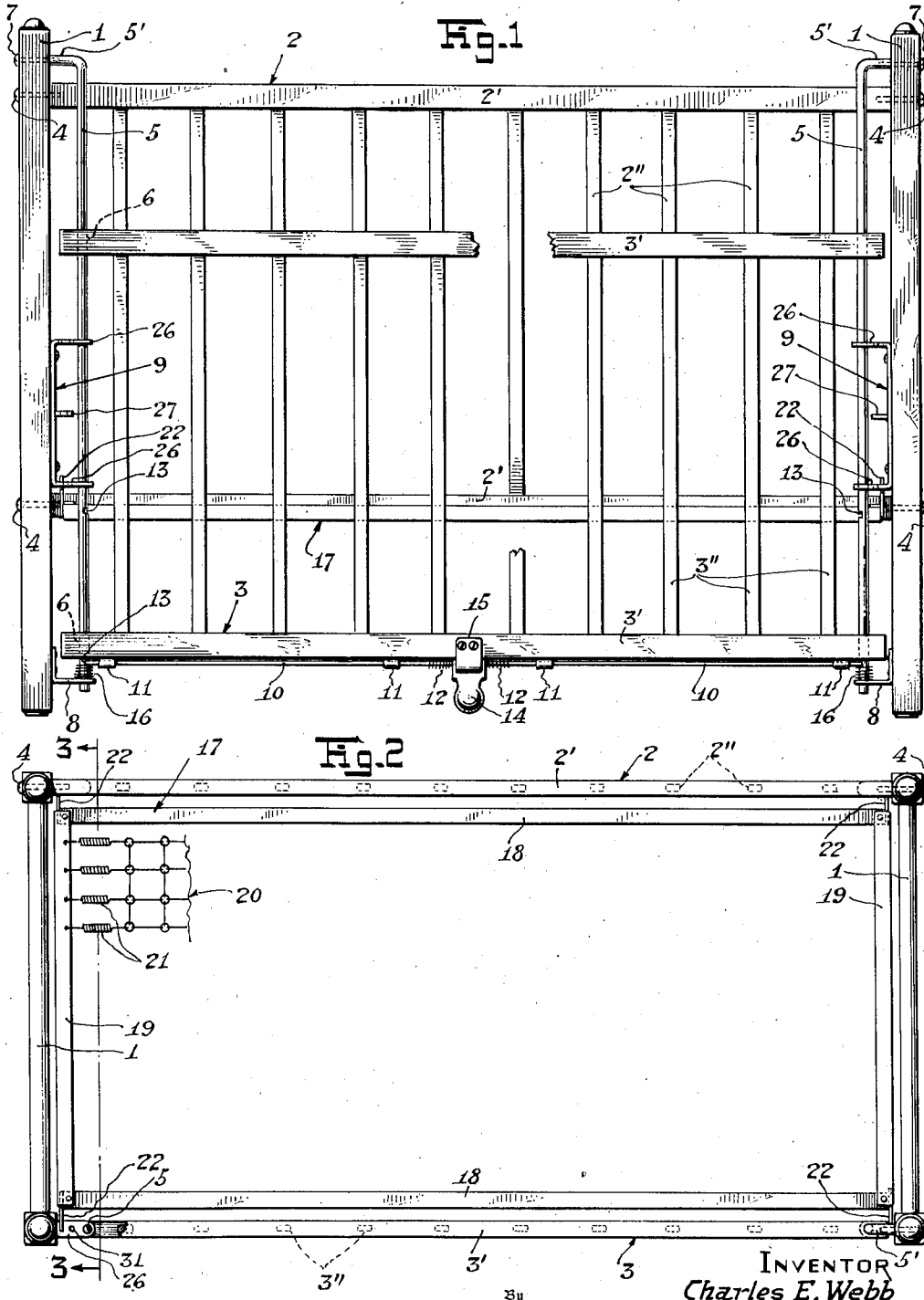
C. E. WEBB

2,328,316

CRTB

Filed Aug. 20, 1941

2 Sheets-Sheet 1



INVENTOR  
Charles E. Webb  
Henry L. Panshan  
Attorney

Aug. 31, 1943.

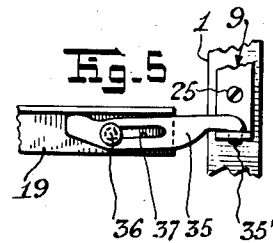
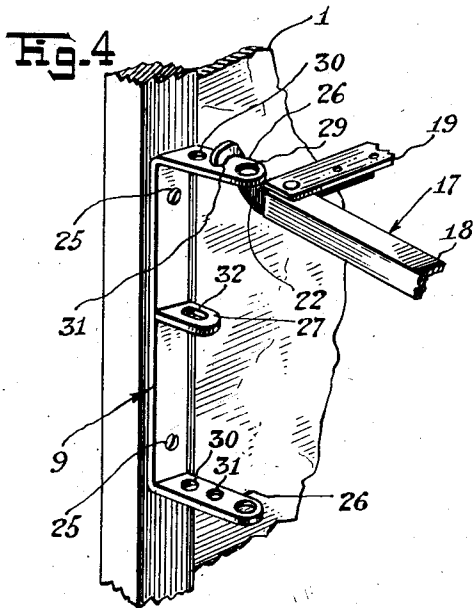
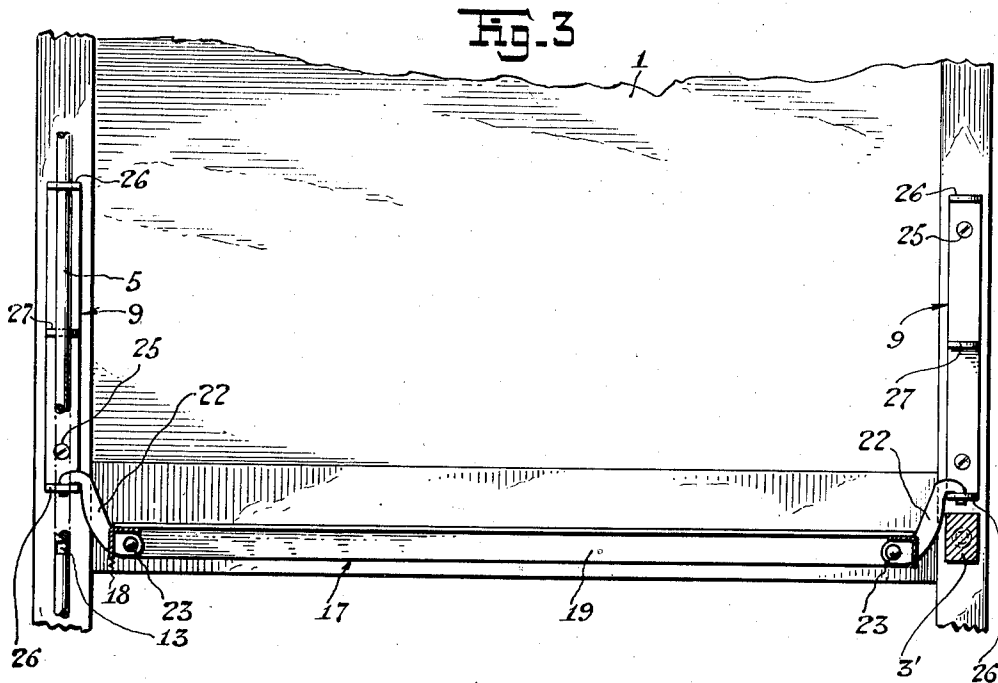
C. E. WEBB

2,328,316

CRIB

Filed Aug. 20, 1941

2 Sheets-Sheet 2



33

Inventor

Charles E. Webb

Henry Canahan

Attorney

## UNITED STATES PATENT OFFICE

2,328,316

## CRIB

Charles E. Webb, New London, Wis., assignor to  
Edison Wood Products, Incorporated, West  
Orange, N. J., a corporation of New Jersey

Application August 20, 1941, Serial No. 407,532

5 Claims. (Cl. 5—11)

This invention relates to cribs and more particularly, to cribs of the type having an adjustable side guard or panel and an adjustable mattress frame.

It is an object of my invention to provide an improved and simplified construction of the type of crib here mentioned.

It is another object to provide improved means for supporting the mattress frame at different levels and/or inclinations and, in particular, to have this means so arranged that it will be effective to rigidify the crib and to hold the mattress frame without play.

A more particular object is to provide a mattress frame with retractable support arms that are restricted to movement laterally of the frame and which are adapted for supporting engagement, without play, with support members at the corners of the crib.

A more specific object is to provide brackets at corners of the crib having horizontal vertically-spaced lugs for supporting an end of the mattress frame at different levels, and wherein the lugs are adapted for supporting engagement with the mattress frame, substantially without play, at each supported position of the latter.

A further object is to provide an improved adjustable support means for a mattress frame, which is especially adapted for use with a crib having a drop side or panel.

Still other objects of my invention will more fully appear from the following description and the appended claims.

In the description of my invention reference is had to the accompanying drawings, of which:

Figure 1 is a side elevational view of a crib incorporating my invention, a part of the front panel of the crib being however broken away;

Figure 2 is a top plan view of the crib shown in Figure 1;

Figure 3 is a fractional, vertical section taken substantially along the line 3—3 of Figure 2 and showing certain details of my invention;

Figure 4 is a fractional view in perspective of one corner of the crib in accordance with my invention, illustrating the adjustable support means for the mattress frame;

Figure 5 is a view showing a modification of my invention.

The embodiment of my invention as is shown in Figures 1 and 2 comprises end sections 1, a rigidly mounted back panel 2 and a front vertically movable panel 3. The back and front panels are of similar construction having, for example, upper and lower horizontal rails 2' and 3' respectively, which are interconnected by vertical

rails 2' and 3' respectively. The back panel 2 is secured rigidly to the end sections 1 by screws 4 which thread into the end portions of the horizontal rails 2'. The front panel 3 slides on vertical guide rods 5 which pass slidably through apertures 6 in end portions of the rails 3'. The guide rods 5 have their upper end portions 5' bent over and secured to the end sections 1 as by screws 7, and are secured to the end sections at their lower ends by brackets 8. In addition, the rods 5 are connected intermediately thereof to the end sections 1 by rigidifying brackets 9 which are hereinafter described in detail. As so arranged, the front panel is movable between upper and lower positions, as between a position at the level of the back panel 2 and the position occupied by the panel in Figure 1.

The movable panel 3 has a mechanism mounted on its lower rail 3' for latching the panel in its respective positions. This latch mechanism—which is of well-known construction—comprises two rods 10 slidably mounted on the lower rail 3' which extend lengthwise of the panel respectively from the center to substantially the opposite ends thereof. The mounting for the rods comprises brackets 11 which provide a freedom of motion to the rods lengthwise of the panel. The rods are biased apart by compression springs 12 to bear at their outer ends against the guide rods 5. In the guide rods 5 are notches 13 with which the rods 10 engage, under the influence of the springs 12, to define the upper and lower positions of the panel. The rods may be released from these notches by actuating a pedal 14 movably mounted on the panel at the center of the lower rail 3' as through a suitable bracket 15. This pedal is coupled to the rods 10 through a suitable cam mechanism (not herein necessary to show), which operates to retract the rods from the guide rods when the pedal is pressed downwardly.

Embracing the guide rods 5 respectively and resting on the brackets 8 are compression springs 16 which serve to take up the shock of the panel 3 should it be let to drop from a raised position. Also, to prevent the panel 3 from being rattled when it is latched in lower position, the lower notches 13 in the guide rods 5 are so positioned in relation to the springs 12 as to require these springs to be compressed to place the panel in its lower latched position.

The structure herein so far described constitutes the framework of the crib. This framework is adapted to support a mattress frame 17

in any one of several different positions, in each case however in such a way as to be rigidified by the mattress frame and to hold the frame itself free from play, as is now described.

The mattress frame 17 is made up of side and end angle irons 18 and 19 suitably bridged by a screen network 20 held taut by tension springs 21, as is shown in Figure 2. This frame 17 has support arms 22 at its four corners which are pivoted to the end angle irons 19 by pivots 23. The axes of these pivots extend lengthwise of the mattress frame as is shown in Figure 3, this positioning of the pivots being to hold the arms 22 free from play in directions lengthwise of the crib as for purposes which will hereinafter be apparent. As so mounted, the support arms 22 may be swung from retracted positions beneath the frame into outward laterally extending positions and vice versa, this retraction of the arms having a principal advantage in permitting a reduced overall size of the carton for packaging the frame for shipping. When in outwardly extended positions, the arms 22 have supporting engagement with the two rigidifying brackets 9 afordescribed and with two other brackets at the other two corners of the crib which, for the purpose of standardizing the parts, are made identical with the rigidifying brackets 9.

Reference being had to Figure 4, it will be seen that each rigidifying bracket 9 is secured to the end section 1 by screws 25 and that it has three horizontal vertically spaced lugs: upper and lower identical lugs 26 and an intermediate lug 27. The lugs 26 are longer than the intermediate lug 27 and are each provided with an aperture 29 at the end thereof which is adapted to receive snugly the corresponding guide rod 5 to hold this rod rigid against sidewise play or movement (it will be understood that the apertures 29 in the two brackets 9 at the corners of the crib adjacent the stationary side panel 2 serve no purpose in the present structure). Beside the aperture 29, the upper and lower lugs 26 each have a pair of inner and outer apertures 30 and 31. These apertures are received by the support arms 22 in the various positions of the mattress frame, the support arms being, for example, of a hook shape adapted to fit these apertures and to be interlocked with the lugs against horizontal play. The holes 30 and 31 are so positioned that when the mattress frame is supported horizontally in either lower or higher positions, the support arms 22 engage the outer apertures 30 of either the upper or lower lugs as the case may be; and that when the frame is supported in inclined position, between the upper lugs at one end and the lower lugs at the other, the support arms 22 engage the inner apertures 31 of these lugs.

To permit the mattress frame to be supported horizontally also at an intermediate level and at different heights with a medium inclination, there are provided the intermediate lugs 27. These lugs have apertures 32 for receiving the ends of the support arms 22 when the arms are in supporting engagement therewith. However, these apertures are elongated in the direction lengthwise of the crib so as to receive the support arms 22 both when the mattress frame is held horizontally by these intermediate lugs and at an inclination as from these lugs at one end of the crib and from either the upper or lower lugs 26 at the other end of the crib, the amount of retraction of the support arms from the crib end sections as the mattress frame is moved to medium inclination being insufficient to permit

the support arms to be received in apertures in the intermediate lugs separate from those received by the support members when the mattress frame is held horizontally.

Since the support arms 22 are free from play in the directions lengthwise of the crib and are adapted to engage the upper and lower lugs of the brackets 9 substantially without play in a horizontal plane, the mattress frame and its support means is effective to rigidify the whole crib structure. Conversely, the mattress frame is supported without play, the freedom from lengthwise play of the frame being particularly important in obtaining a well-constructed and commercially suitable crib. While some play of the mattress frame is permitted when it is supported from the intermediate lugs 27, because of the slot-like shape of the apertures 32, this play is of such limited character as to be not particularly objectionable.

It will be seen that when the support arms 22 are in their outward effective positions, as is defined by the abutment of the arms against the horizontal flanges of the end angle irons 19 of the mattress frame, they extend upwardly to form a hanger type of support for the frame. This permits the frame to be supported at lower levels in the crib and thus gives a greater depth to the crib as in respect of the distance from the frame to the top of the side panels.

The crib arrangement hereinabove described is of particularly simple form; yet it has the desirable features of adjustability of the mattress frame and of the side panel, and of being of a highly rigid construction in each of the various adjusted positions of these parts. While I have herein disclosed but one side panel as being vertically adjustable, no unnecessary limitation of my invention to a crib having but one adjustable side panel is intended. It will, for example, be seen that the movable mounting of the panel 3 may be duplicated with respect to the panel 2, and that the crib structure will yet be held angularly rigid at its corners by the mattress frame and support means therefor as is hereinabove described.

In Figure 5 there is shown a modification of my invention in respect of the retractable support arms for the mattress frame. In accordance with this modification, the mattress frame is provided with support arms 35 at its corners which are in the shape of bars but which terminate in hooks 35' adapted for supporting engagement with the lugs of the respective brackets 9. This support arm 35 is secured to the vertical flanges of the end angle irons 19 by a stud 36, the arm 35 having a slot 37 lengthwise thereof through which the stud extends. As so arranged the arms may be slid laterally of the frame, through the distance equal to the length of the slots 37, between a retracted position beneath the frame and an outward extended position for supporting engagement with the respective brackets 9, the arms being restricted to sliding motion by the contact of the top edge thereof against the horizontal flanges of the end angle irons 19 of the frame. By restricting the motion of the support arms to directions lateral of the frame, the frame is again held free from lengthwise play and is effective to rigidify the crib. To prevent lateral play of the frame, the support arms may be so arranged that the studs 36 will engage the inner ends of the slots 37 when opposite support arms are in supporting engagement with their respective brackets.

The embodiments herein disclosed will be understood to be illustrative and not necessarily limitative of my invention as the same are subject to modifications and changes without departure from the scope of my invention, which I endeavor to express according to the following claims.

I claim:

1. In a crib having end sections, a movable side panel, and guide rods on the end sections for the side panel: the combination of rigidifying brackets for said guide rods provided with vertically spaced portions having holes spaced horizontally in the direction lengthwise of the crib; and a mattress frame having arms at its corners adapted to be supported by said bracket portions to hold the frame selectively at different heights and inclinations, said arms being rigid to the frame in the direction lengthwise of the crib and adapted to fit said holes to form interlocking joints with said brackets at each adjusted position of the mattress frame whereby to rigidify the crib.

2. In a crib: the combination of brackets at the corners of the crib each having a plurality of horizontally extending, vertically-spaced, apertured lugs: a mattress frame having support members at the corners thereof held rigid thereto against play lengthwise of the frame and adapted to be supported in different inclinations by a supporting engagement of said members with said lugs selectively, said support members having downward extensions to fit the apertures in said lugs and the lugs at one end of the crib having separate apertures spaced longitudinally of the crib to receive said extensions when the frame is supported in different inclinations.

3. In a crib: the combination of brackets at the corners of the crib each having a plurality of horizontal vertically-spaced lugs, said lugs each having a pair of holes therein spaced lengthwise of the crib; and a mattress frame adapted to be supported by said brackets in horizontal and inclined positions, said mattress frame having support members connected thereto at the corners thereof for movement from retracted positions beneath the frame to outwardly projecting positions for supporting engagement with said lugs, said support members being held rigid against any substantial play lengthwise of the frame and

being adapted to engage the outer ones of said holes when the frame is supported in horizontal position and to engage the inner ones of said holes when the frame is supported in inclined position.

4. In a crib having end sections, a movable side panel and vertical guide means on said end sections for said side panel: the combination of brackets on said end sections for rigidifying said guide means, said brackets having horizontal vertically-spaced lugs thereon, the lugs of each said brackets having holes therein spaced lengthwise of the crib; and a mattress frame having laterally extending support members at the corners thereof held rigid thereto against any substantial play lengthwise of the frame and adapted for selective engagement with said lugs to hold the frame in different horizontal and inclined positions, said lugs being engaged by said support members in their inner holes when the frame is supported in inclined position and in their outer holes when the frame is supported in horizontal positions, the engagement of said members with said lugs being adapted to hold the frame rigid against play.

5. In a crib: the combination of brackets at the corners of the crib having three horizontal vertically-spaced lugs thereon, the intermediate lug of each said brackets having a slot therein extending lengthwise of the crib and the upper and lower lugs each having a pair of holes spaced apart lengthwise of the crib; and a mattress frame adapted to be supported at different levels and inclinations by said brackets, said mattress frame having support members at the corners thereof held rigid thereto against any substantial play lengthwise of the frame and adapted to engage the said outer holes of the upper and lower lugs of the brackets to support the frame horizontally at upper and lower levels respectively, to engage said slots to support the frame horizontally at the intermediate level, to engage the outer sets of holes of the upper and lower lugs respectively and the slots of the intermediate lugs to support the frame with medium inclination at different elevations, and to engage the inner sets of holes of the upper and lower lugs to support the frame at full inclination.

CHARLES E. WEBB.