May 24, 1960 R. E. HENDRICKSON 2,937,385

PLAY PEN

Filed Aug. 14, 1958 3 Sheets-Sheet 1

Fig.1

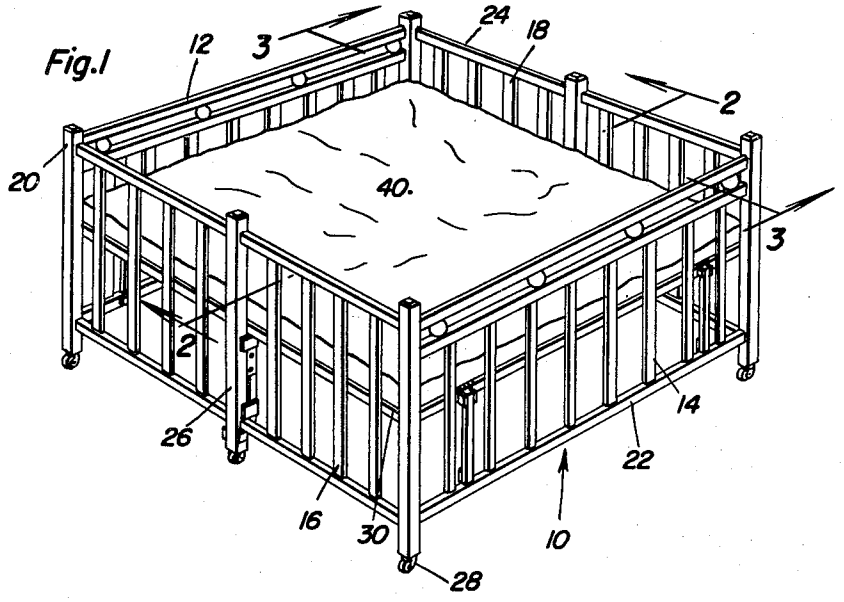


Fig.2

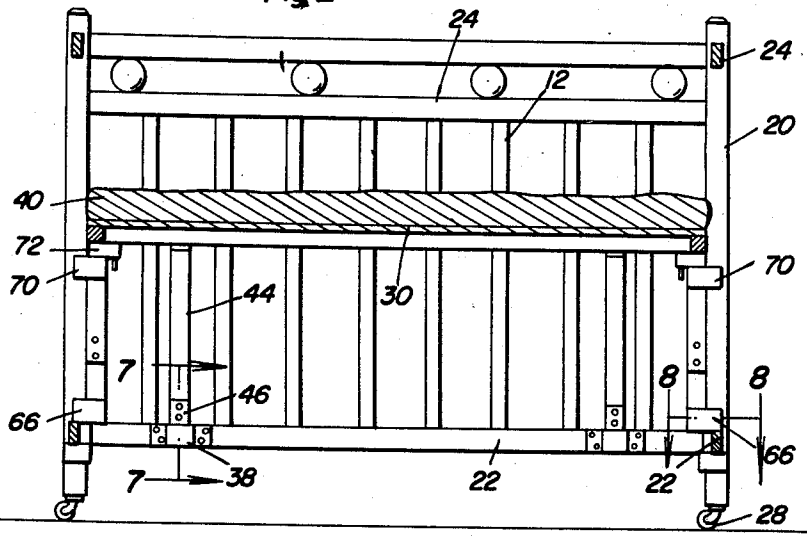
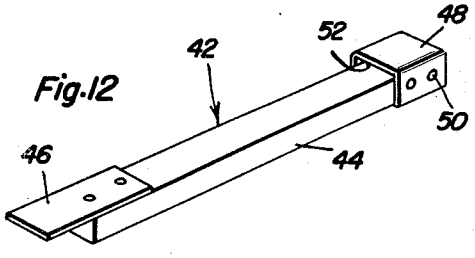


Fig.12



Roy E. Hendrickson
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

May 24, 1960 R. E. HENDRICKSON 2,937,385

PLAY PEN

Filed Aug. 14, 1958 3 Sheets-Sheet 2

Fig.3

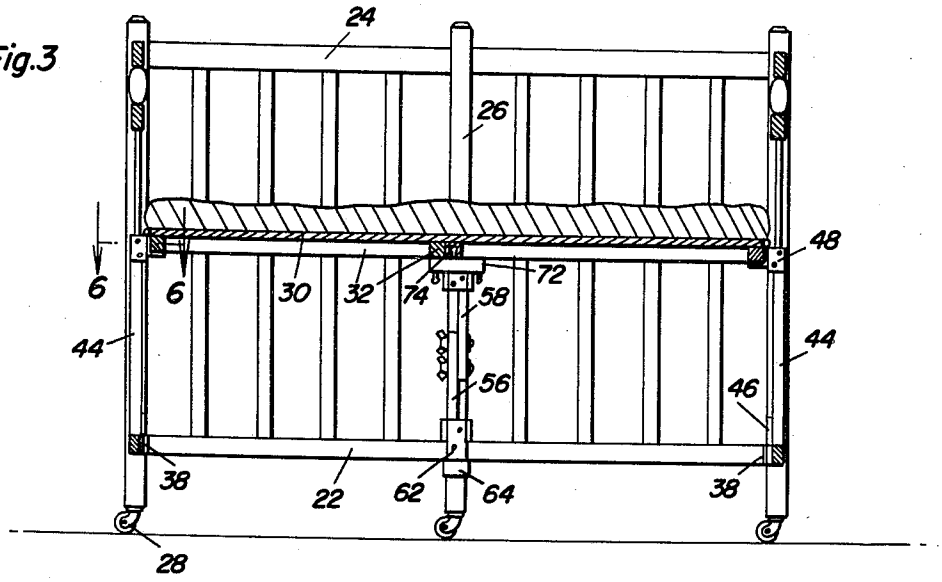


Fig.4

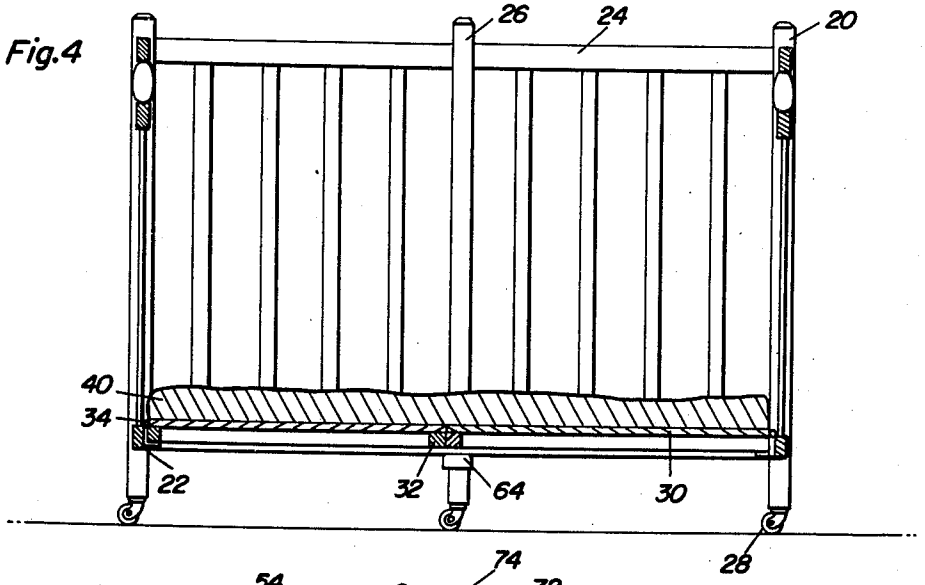
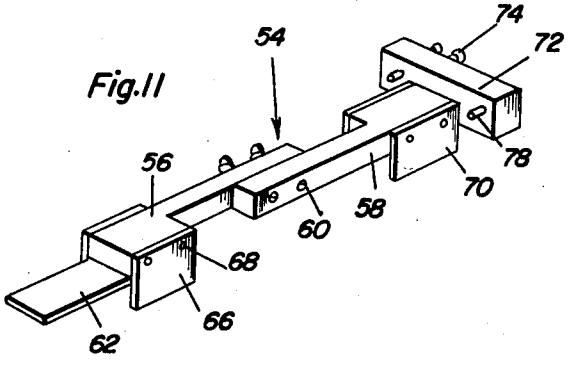


Fig.11



Roy E. Hendrickson

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

May 24, 1960 R. E. HENDRICKSON 2,937,385

PLAY PEN

Filed Aug. 14, 1958 3 Sheets-Sheet 3

Fig.5

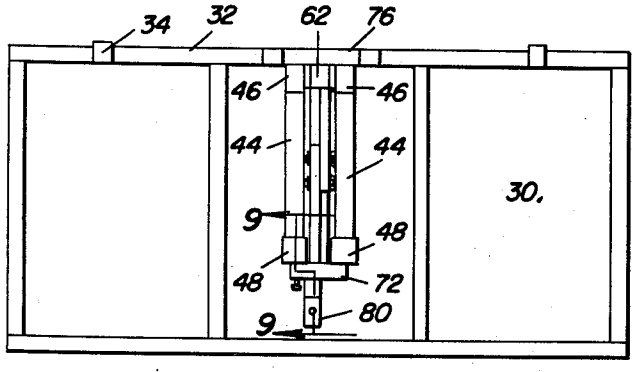


Fig.6

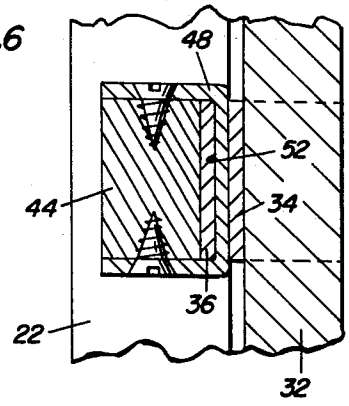


Fig.7

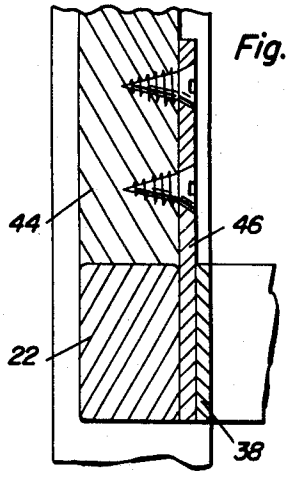


Fig.8

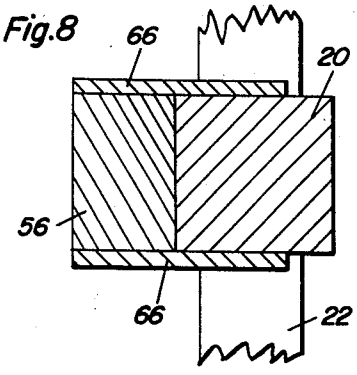


Fig.9

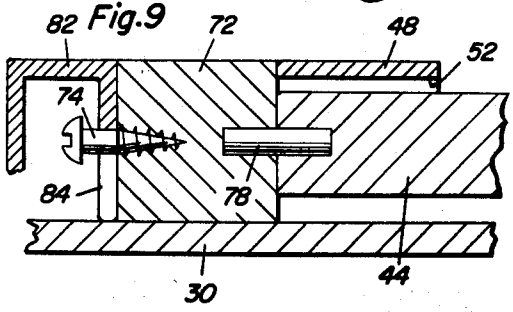
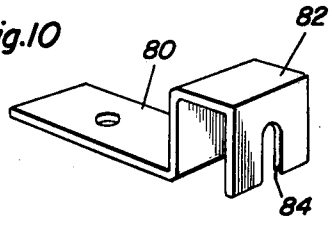


Fig.10



Roy E. Hendrickson

INVENTOR.

BY Thomas A. O'Brien and Harvey B. Jacobson

Attorneys

United States Patent Office 2,937,385 Patented May 24, 1960

2,937,385

PLAY PEN

Roy E. Hendrickson, R.R. 3, Box 1139, Modesto, Calif.

Filed Aug. 14, 1958, Ser. No. 755,034

4 Claims. (Cl. 5—93)

The present invention generally relates to an article of furniture generally known as a play pen and incorporates novel and improved structures in such play pens including a floor or bottom which may be elevated from its normal position to a raised position so that an infant placed in the play pen will be more easily accessible for lifting, feeding and changing the diapers or dressing.

Play pens are used quite extensively for small children. Generally, a play pen is not employed until the child is in the crawling stage and is capable of standing inasmuch as the floor of the play pen is adjacent to the supporting surface upon which it rests thereby requiring that a person lifting a small baby when lying down must necessarily bend completely over which is extremely difficult and tiring if the bending over position is maintained for any length of time. Further, the bottom or floor of the play pen being adjacent the floor surface on which it rests receives all of the drafts normally occurring adjacent the floor surface. Accordingly, it is the primary object of the present invention to provide a play pen having a bottom which may be elevated to a position below the top of the play pen so that the play pen still will form a retainer for the infant but will support the infant in elevated position away from the floor surface and the cold drafts adjacent thereto and in position for easy access by the mother or person tending the child and also positioning the baby in a better position so that he may observe the various actions surrounding him while lying in a more natural position, that is, without the baby having to twist his neck and head into an awkward position for observing the action of grownups as well as observing stationary objects which are normally disposed above the floor level.

Another object of the present invention is to provide a play pen having an adjustable bottom which is supported in elevated position by a plurality of removable standards which form a positive support for the bottom of the play pen and which may be stored on the bottom surface of the bottom of the play pen when not in use thereby permitting the play pen to be employed in the normal manner and permitting the play pen to be folded in the usual manner.

Yet another object of the present invention is to provide a play pen having an adjustable bottom therein which is extremely simple in construction, easy to adjust, neat in appearance, safe, rugged in construction, and relatively inexpensive to manufacture.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of the play pen of the present invention illustrating the bottom thereof elevated to its upper position and supported by the standards;

Figure 2 is a vertical sectional view taken substantially upon a plane passing along section line 2—2 of Figure 1;

Figure 3 is a sectional view taken substantially upon a plane passing along section line 3—3 of Figure 1 illustrating the details of construction thereof;

Figure 4 is a vertical sectional view similar to Figure 3 but with the play pen bottom in its normal position;

Figure 5 is a bottom plan view of one section of the bottom of the play pen illustrating one-half of the standards supported thereon with the other half being supported on the other half of the bottom of the play pen;

Figure 6 is a detailed sectional view taken substantially upon a plane passing along section line 6—6 of Figure 3 illustrating the connection between one edge of the bottom and one of the end standards;

Figure 7 is a detailed sectional view taken substantially upon a plane passing along section line 7—7 of Figure 2 illustrating the connection between the lower end of the standards and the lower frame rail;

Figure 8 is a detailed sectional view taken substantially along the section line 8—8 of Figure 2 illustrating the projecting lugs on the side standards and the manner in which they engage the lower rail of the play pen;

Figure 9 is a detailed sectional view taken substantially upon a plane passing along section line 9—9 of Figure 5 illustrating the manner in which the brackets are interconnected for support on the undersurface of the bottom of the play pen;

Figure 10 is a perspective view of the bracket for retaining the standards in stored position;

Figure 11 is a perspective view of one of the side standards; and

Figure 12 is a perspective view of one of the end standards.

Referring now specifically to the drawings, the numeral 10 generally designates the play pen of the present invention which incorporates a substantial amount of conventional construction as to the components of the walls. The play pen 10 includes an end wall 12 and an end wall 14 and side walls 16 and 18. The various walls are interconnected by corner posts 20 and each wall is provided with a lower rail 22 and a single upper rail 24 on the side walls and a double upper rail on the end walls. Various decorative ornaments may be provided as desired and the upper and lower rails are interconnected by the usual slats. The side walls 18 are each foldable inwardly in the center thereof with the details of the hinged connection being omitted but with the central supporting post 26 illustrated. The corner post and the central post 26 in the side walls are all provided with a caster wheel 28 which is optional and may or may not be provided.

Disposed between the various walls is a horizontal bottom 30 of two sections having a peripheral frame 32 on the bottom surface thereof with the sections of the bottom being hingedly connected to the frame 32 by hinge members 34 having a depending strap 36 received in a metal loop 38 on the inner surface of the bottom rail 22. Disposed on the upper surface of the bottom 30 is a pad, cushion or mattress designated by the numeral 40 and which may be of any convenient construction.

The end walls 12 and 14 each have two supporting loops 38 and there are two hinges 34 on each end edge of the bottom 30. The center edges of the sections of the bottom 30 will engage the usual support ledges provided therefor.

For supporting the end edges of the bottom in elevated position, there are four supporting standards provided with two standards on each end with the standards generally designated by the numeral 42 and including an elongated member 44 having a longitudinally extending tab or lug 46 on one side edge thereof with the lug 46

extending beyond the bottom end of the elongated member 44. A generally channel shaped loop 48 is attached to the upper end of the elongated member 44 by fastening members 50 and the bight portion of the channel shaped or U-shaped member 48 is parallel with one side edge of the elongated member 44 and spaced therefrom with the space being designated by the numeral 52. The lower end of the elongated member 44 is orientated with the lug 46 received in the loop 38 and the depending strap or lug 36 on each hinge 34 is received in the space 52 between the bight portion of the U-shaped member 48 and the side surface of the elongated member 44 thereby rigidly interconnecting the bottom rail 22 and the bottom 30 with the bottom 30 in elevated position.

Inasmuch as the bottom 30 is constructed of two sections, there are two supporting standards for the side edges of the bottom 30 with the standards being generally designated by the numeral 54 and being staggered in relation to the line of separation between the sections of the bottom 30, that is with one of the standards 54 on either side thereof for providing adequate support for the bottom 30.

Each of the standards 54 includes a lower section 56 and an upper section 58 which are overlapped in relation to each other and secured in adjusted position by bolts 60 which may be adjustable by the provision of slots in each of the upper and lower sections for providing longitudinal adjustment of the side standard 54. It may be added that the end standard 42 may be made adjustable in the same manner, that is by the provision of overlapping sections having aligned longitudinal slots with fastening bolts securing the same in adjusted position.

Attached to the lower section 56 is a longitudinally and downwardly projecting lug 62 for engagement with a loop 64 which is the same as the loops 38. Mounted on the lower section 56 and at the lower end thereof is a pair of laterally extending projecting members 66 which are secured to the side edges of the lower section 56 by fastening elements 68. The upper section 58 is also provided with a pair of laterally projecting members 70 secured in the same manner. The laterally extending members 66 and 70 respectively overlie and engage the upper surface of the lower rail 22 and against the undersurface of the peripheral frame 32 on the bottom 30 as clearly shown in Figure 1. The laterally extending members 66 and 70 also bridge the center post 26 for locating the standard 54. On the upper end of the upper section 58 is a transverse block 72 having a pair of upwardly projected round headed screws 74 thereon which engage small sockets in the bottom surface of the abutting frame elements 32 of the sections of the bottom 30 thus locating the top end of the side standard 54 in relation to the bottom thereby supporing both edges of the bottom. As shown in Figure 3, and also in Figure 11, the pins 74 are offset to one side of the block 72 but due to this staggered relation, the supporting standards 54 positively and rigidly support the adjacent edges of the sections of the floor 30. Thus, with this orientation of elements, the laterally projecting members 70 do not engage the bottom 30 but act as a support for the block 72.

Thus, with the play pen in the condition shown in Figure 4, the straps 38 support the lug 36 on the hinges 34 thus supporting the end edges of the bottom 30 with the side edges thereof supported in the usual manner. When it is desired to elevate the bottom 30, the same is merely lifted up and the end standards 42 are inserted with the lugs 46 inserted into the straps 38 with the lenogated member 44 overlying the bottom rail 22 as clearly shown in Figure 7. The lug 36 on the hinge 34 is then engaged in the space 52 as clearly shown in Figure 6 with the elongated member 44 having the upper end thereof disposed exteriorly of the frame 32 which supports the bottom 30. The standards 54 are then inserted with the lugs 62 engaging the loop 64 with the upper and lower sections 56 being disposed inwardly of the lower frame rail 22 and with the lugs 66 and 70 bridging the central post 26 with the lateral projection 66 engaging the upper surface of the frame rail 22 as clearly indicated in Figure 8. The round headed screws 74 are then engaged in the sockets in the bottom surface of the adjacent elements of the supporting frame 32 thus supporting the central side sections of the bottom 30. When it is desired to reconvert the play pen to a conventional nature, it is merely necessary to remove the various standards.

For supporting the standards when not in use for ease of storage, each section of the bottom 30 is provided with an elongated loop 76 on the outer edge of the frame 32 between the hinges 34 for receiving the lugs 46 and the lug 62 on two of the end standards 42 and one of the side standards 54 with the side standard 54 being disposed between the end standards 42 as shown in Figure 5. The transverse block 72 on the side standard 54 is provided with a pair of projections 78 with one located adjacent each end for engagement in a socket in the end of the elongated member 44 so that the three standards will be interconnected. Then, a bracket 80 is provided with an end portion 82 having a notch 84 in one leg thereof for engagement under one of the round headed screws 74 on the transverse block 72 thus supporting the end of the standard 54 adjacent the undersurface of the bottom 30. The bracket 80 is supported in any suitable manner such as by an easily manipulated fastener so that the notch 84 may be brought into engagement with one of the round headed screws 74 for supporting the standards adjacent the undersurface of the bottom 30 thereby providing a storage for the three standards and providing a storage which is positive in its operation and requiring the loosening of the bracket 80 for removing the same for use.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A play pen comprising vertically disposed end walls and side walls interconnected by corner posts, each wall including a bottom rail, a bottom for said play pen with the bottom normally being supported from the bottom rail, and a plurality of standards extending between the bottom rail and bottom for supporting the bottom in vertically spaced relation to the bottom rail, each of the standards being provided with a longitudinally projecting lug, said bottom rail having a plurality of loop shaped members mounted thereon for slidably receiving the lugs for mounting the standards in vertical position, and means detachably connecting the upper end of the standards with the bottom.

2. A play pen comprising vertically disposed end walls and side walls interconnected by corner posts, each wall including a bottom rail, a bottom for said play pen with the bottom normally being supported from the bottom rail, and a plurality of standards extending between the bottom rail and the bottom for supporting the bottom in vertically spaced relation to the bottom rail, certain of said standards being provided with longitudinal sockets on the upper end thereof, said bottom having hinge means on the end edge thereof with each hinge means having a depending lug for slidable engagement with the socket for supporting the end edges of the bottom.

3. A play pen comprising vertically disposed end walls and side walls interconnected by corner posts, each wall including a bottom rail, a bottom for said pen with the bottom normally being supported from the bottom rail,

and a plurality of standards extending between the bottom rail and the bottom for supporting the bottom in vertically spaced relation to the bottom rail, each of he standards being provided with a longitudinally projecting lug, said bottom rail having a plurality of loop-shaped members mounted thereon for slidably receiving the lugs for mounting the standards in vertical position, and means detachably connecting the upper ends of the standards with the bottom, certain of the standards being used with the side wall and include a pair of lower lateral projections for bridging a center post in the side wall and engaging the upper surface of the lower rail, and a pair of upper laterally projecting members for bridging the upper end of the central post and positioning the standards for engagement with the adjacent edges of the sections of a foldable bottom.

4. In combination with a play pen having four walls and a bottom supported within the confines of the four walls, a plurality of standards, means detachably interconnecting the lower ends of the standards and the lower edges of the four walls, means releasably connecting the upper ends of the standards to the bottom surface of the bottom of the play pen, thereby supporting the bottom of the play pen in elevated position, and means provided on the undersurface of the bottom of the play pen for storage of the supporting standards when not in use.

References Cited in the file of this patent

UNITED STATES PATENTS

190,817	Butler	May 15, 1877
1,322,616	Rece	Nov. 25, 1919
1,435,299	Holbrook	Nov. 14, 1922
1,895,885	Kusterle	Jan. 31, 1933
2,553,579	Harris	May 22, 1951
2,641,774	Carbee	June 16, 1953

FOREIGN PATENTS

23,789	Finland	Jan. 16, 1950