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C. T. DE PUY

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PLAYYARD, CRIB, AND COMBINED PLAYYARD AND CRIB

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3 Sheets-Sheet 1

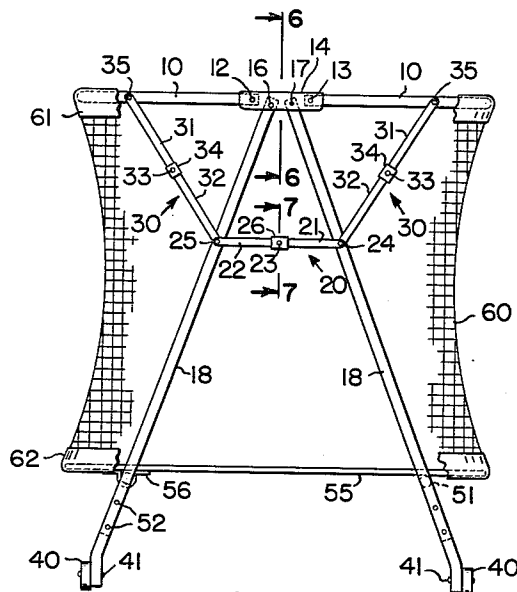


FIG. 1

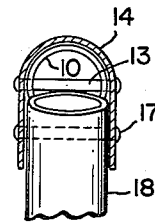


FIG. 6

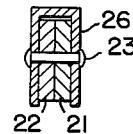


FIG. 7

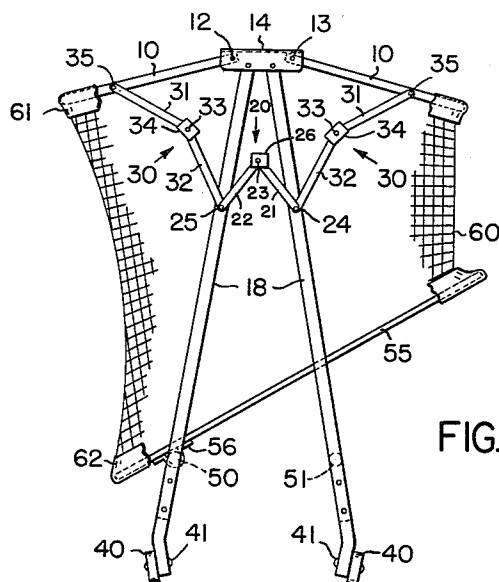


FIG. 2

INVENTOR.

CHARLES T. DE PUY

BY

B. H. Shleinger
Attorney

June 11, 1963

C. T. DE PUY

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3 Sheets-Sheet 3

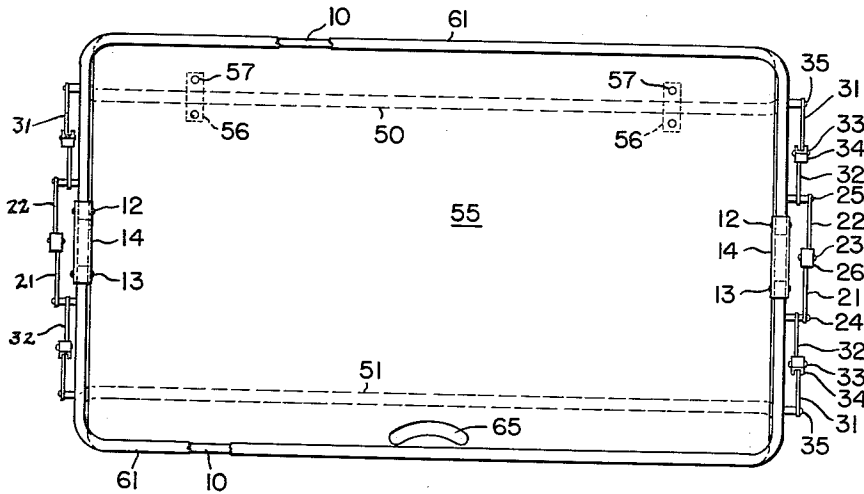


FIG. 5

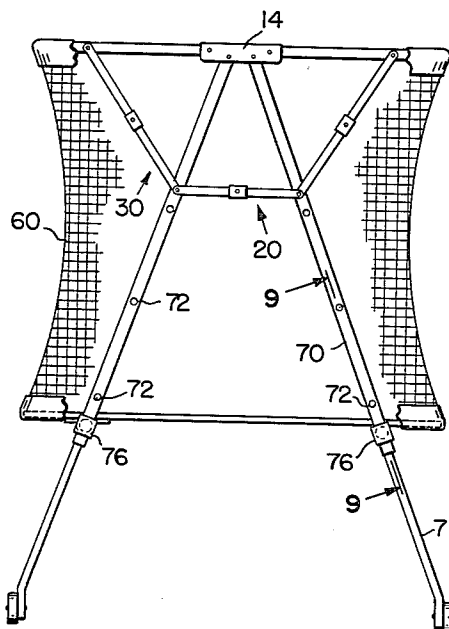


FIG. 8

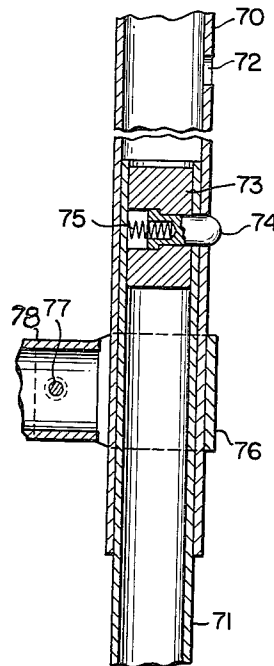


FIG. 9

INVENTOR.
CHARLES T. DE PUY

BY

B. Shlenger
Attorney

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3,092,847

PLAYYARD, CRIB, AND COMBINED PLAYYARD AND CRIB

Charles T. De Puy, Rochester, N.Y., assignor, by mesne assignments, to Trimble Products Incorporated, South-
ern Pines, N.C., a corporation of Delaware
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6 Claims. (Cl. 5—99)

The present invention relates to playyards or playpens for babies, and more particularly to a foldable playyard or playpen.

Conventionally, a playyard is an article of baby furniture, used during the waking, play hours of the baby. For sleeping, a crib must be provided. For the average young family, the need to purchase both a playyard and a crib can oftentimes tax the family budget.

Conventional babies' playyards or playpens, moreover, are usually so large that it is impossible to get them through the ordinary interior doorway of a house without folding them. This means that if the mother wishes to move the playyard from one room to another, or from a room to outdoors, and vice versa, she has to fold the playyard, and, if the baby is in it, to take the baby out, before she can transport the playyard.

For ease of folding, conventional playyards are made with folding floors. This requires that some means be provided for supporting the floor at its center. It also adds to their cost.

One object of the present invention is to provide a playyard which can be rolled or moved through an ordinary interior doorway without folding, yet which can be folded when it is desired to store it away.

Another object of the invention is to provide an article of child's furniture which can easily be converted from a playyard to a crib, and vice versa, so that the same piece of equipment may serve a baby during both waking and sleeping hours.

Another object of the invention is to provide a foldable playyard which has a one-piece floor.

Another object of the invention is to provide a piece of baby furniture of the type described which will be light in weight while having the requisite strength, which will be easy to carry about and to transport, easy to handle, and which can quickly and readily be folded or unfolded.

A further object of the invention is to provide a playyard or combined playyard and crib which will be compact when folded and occupy a minimum of space.

Other objects of the invention will be apparent hereinafter from the specification and claims particularly when read in conjunction with the accompanying drawings.

In the drawings:

FIG. 1 is an end elevation of a playyard constructed according to one embodiment of this invention, the playyard being shown opened in position for use, and the netting being partly broken away;

FIG. 2 is an end elevation, showing the playyard partly folded, the netting being again partly broken away;

FIG. 3 is a side elevation of the opened playyard, again with the netting partly broken away;

FIG. 4 is a section on the line 4—4 of FIG. 3 looking in the direction of the arrows;

FIG. 5 is a top plan view of the playyard;

FIG. 6 is an enlarged section on the line 6—6 of FIG. 1 looking in the direction of the arrows;

FIG. 7 is an enlarged section on the line 7—7 of FIG. 1 looking in the direction of the arrows;

FIG. 8 is an end view illustrating a modification of the invention which permits use of the device either as a

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playyard or as a crib, the netting being again partly broken away; and

FIG. 9 is an enlarged section on the line 9—9 of FIG. 8.

Each of the playyards shown in the drawings comprises a generally rectangular frame which is made in two parts, each a generally U-shaped frame member. The bight portions of the two form the longer sides of the frame of the playyard; and the legs of the U-shaped frame members form the shorter sides of the upper frame of the playyard, one leg of each U-shaped frame member constituting a part of each short side of the frame, and the other leg of each U-shaped frame member constituting another part of each other short side of the frame. The ends of the legs of the two U-shaped frame members are in opposed relation and are pivotally connected to cap members, each of which in turn has two supporting legs pivoted thereto. The two supporting legs at one end of the playyard are aligned, respectively, with the two supporting legs at the other end of the playyard; and the aligned legs are pivoted at their upper ends to the associated caps for pivotal movement about a common axis. Each pair of aligned legs is connected adjacent their lower ends by a bar which may be integral with the legs or be riveted or otherwise secured thereto. The floor of the playyard, which is in one piece, is pivotally mounted on one of these bars; and, when the playyard is opened, rests on and is supported by the other bar. The two legs at one end of the frame have rollers on them so that by slightly tilting the playyard upwardly it can be rolled over a floor to move it from one place to another. The playyard is enclosed by nylon netting or the like which is secured at its upper end around the frame and at its lower end around the floor. When the playyard is in use the U-shaped frame members are supported from the legs in horizontal position by extended, foldable braces; and the two legs at each end of the playyard are held apart by other extended, but foldable, braces. To fold the playyard, the braces are broken and folded, and the floor is lifted by grasping a hand grip provided in it adjacent one side, and the legs at each end of the playyard are moved toward one another.

In one embodiment of the invention the legs are telescoping and can be adjusted to locate the floor of the playyard at different heights. Thus, the device can readily be converted from use as a playyard for use as a crib, and vice versa.

Referring now to the drawings by numerals of reference, and first to the embodiment illustrated in FIGS. 1 to 7 inclusive, the two U-shaped tubular frame members, which together constitute the frame of the playyard, are denoted at 10. These frame members are of equal size and are positioned so that their bight portions are parallel and form the longer sides of the frame, and so that the legs of one are in alignment with the legs of the other at opposite ends of the frame, when the playyard is in open position. These frame members are pivotally connected at their ends by pivot pins 12 and 13 to inverted U-shaped metal caps 14, which are in turn connected by means of pivots 16 and 17 to the legs 18 and 19 at opposite ends, respectively, of the playyard. The two legs at each end of the playyard or crib are connected together by means of a foldable brace 20, the two parts 21 and 22 of which are pivotally connected together by means of a pin 23, and are connected by pins 24 and 25, respectively, to the two legs 18 or 19, as the case may be. A U-shaped clip 26, which is secured to the brace parts 21 and 22 by the pin 23 serves to protect against a person being pinched when folding the brace, and serves to limit movement of the brace members 21 and 22 in upward direction to prevent accidental col-

lapse of the playyard. Each leg 18 and 19 is pivotally connected by a foldable brace 30 to one of the U-shaped frame members 10. Each brace 30 is made in two parts 31 and 32 which are pivotally connected together by a pin 33, and which are held in extended position against folding in one direction by a U-shaped clip 34. The part 31 of each brace is pivotally connected by means of a pin 35 to the associated U frame member 10 and the part 32 of each brace is pivotally connected by means of the pin 25 to the associated leg 18 or 19, as the case may be.

Each of the legs 18 at one end of the playyard or crib has a roller 40 rotatably mounted on it adjacent its bottom by means of the stud or shaft 41. Each of the legs 19 at the opposite end of the frame have rubber boots or shoes 42 on them to prevent marring the floor, and to hold the playyard or crib against accidental movement when it is in use. The studs or shafts 41 extend in a direction perpendicular to the long sides of the frame so that the playyard or crib can readily be rolled endwise, when it is tilted slightly to lift the boots 42 off the floor.

One pair of legs 18 and 19 is connected together adjacent their lower ends by an inverted U-shaped supporting bar 50, one of whose lower ends is riveted by rivets 52 to the leg 18 of the pair and the other of whose lower ends is riveted by rivets 53 to the other leg 19 of the pair. The other pair of legs 18 and 19 is connected by a similar bar 51, similarly attached.

The floor of the playyard is denoted at 55. It is made in one piece. It is pivotally mounted on the supporting bar 50 by means of U-shaped clips 56 that are riveted to the floor by rivets 57. It is adapted to rest on the bar 51 when the playyard is open as shown in FIG. 1.

The body or enclosing portion of the playyard is made of a flexible material, such as nylon netting, which is denoted at 60. This netting is shown only fragmentarily in the figures for clarity in illustration of other parts. The netting 60 extends all around the playyard inside the legs 18 and 19. It is suspended at its upper end from the U-shaped frame members 10 by means of a plastic or fabric sleeve 61, to which it is sewed or otherwise fastened. The sleeve 61 may be cut away adjacent the pivots 12 and 13 and 35 to permit ready folding. At its lower end the netting is sewed or otherwise secured to another sleeve 62 which is lapped over the bottom of the floor of the playyard, and which can be resiliently held to the floor by spring rods or the like. A crescent-shaped slot 65 (FIG. 4) is provided in the floor 55 to form a hand grip for lifting the floor in the folding of the playyard and for transporting the playyard when it is folded.

Assuming that the playyard is in the extended position shown in FIGS. 1, 3 and 4, to fold the playyard, the braces 20 and 30 at the two ends of the playyard are broken, and then the floor is lifted by the hand grip 65 to fold the playyard into collapsed position for easy transportation. The floor 55 simply pivots on the cross rod 50 rising off of the cross bar 51; and the legs 18, 18 and 19, 19 fold toward one another. Their aluminum caps 14 prevent pinching of the fingers in folding.

To open up the playyard for use, a person needs only to grasp the U-shaped frame members 10, and pivot them upwardly to horizontal position, and to set the braces 20 and 30 in their extended positions. The aluminum caps 14 limit the upward movement of the frame members 10 so that these frame members are horizontal when the playyard is open.

As previously stated, the body or skirt 60 is preferably made of nylon netting for lightness, openness, flexibility and strength, but obviously may be made of other flexible materials also. The floor is preferably made of pressed board, which is light in weight and low in cost.

In the embodiment of the invention illustrated in FIGS. 8 and 9, the structure is the same as already described except that the legs are made telescoping so that the

height of the floor 55 of the playyard above the floor of a room or the ground can be adjusted. The upper section 70 of each leg is tubular and is adapted to slidably receive a tubular lower section 71. Each upper section has a plurality of holes 72 in it spaced along its length, that are adapted to receive selectively a spring-pressed pin 74 to adjust the height of the playyard above the room floor or the ground. A pin 74 is slidably mounted in a block 73 in the upper end of each leg section 71, and is constantly urged outwardly, to engage a hole 72, when in registry therewith, by a spring 75.

Instead of using U-shaped cross bars such as shown at 50 and 51, the cross bars 78, which support the floor of the combination playyard and crib, are fastened to the upper portions 70 of the legs by circular clips 75 which are welded or riveted to these leg sections 70.

While the invention has been described in connection with two different embodiments thereof, it will be understood that it is capable of further modification, and this application is intended to cover any variations, uses, or adaptations of the invention following, in general, the principles of the invention and including such departures from the present disclosure as come within known or customary practice in the art to which the invention pertains and as may be applied to the essential features hereinafter set forth, and as fall within the scope of the invention or the limits of the appended claims.

Having thus described my invention, what I claim is:

1. A folding playyard, crib, or the like device, comprising

- (a) a rectangular shaped frame having two short and two long sides, said frame comprising
- (b) two rigid, generally U-shaped frame members, disposed with the ends of one member adjacent the ends of the other member, the bight portions of said frame members forming the longer sides of said frame and the leg portions of both said U-shaped frame members forming parts of both shorter sides of said frame,
- (c) two pairs of legs, one leg of each pair being pivotally interconnected adjacent its upper end with one leg portion of each of the two frame members, the two legs at each shorter side of the frame being pivotable toward and from one another,
- (d) a brace connecting the two legs at each end of the frame to one another to hold the legs in extended unfolded position,
- (e) a brace connecting one leg of one pair of legs to one of the frame members, and a brace connecting one leg of the other pair of legs to the other frame member, to hold the frame members in unfolded position,
- (f) a bar rigid with each pair of legs and connecting said legs, the two said bars being parallel and extending in the direction of the longer sides of said frame,
- (g) a single-piece floor pivotally mounted on one of said bars and positioned to rest on the other of said bars when the legs are pivoted apart, and
- (h) a flexible skirt connected at its upper end to said frame around the perimeter thereof and at its lower end around said floor.

2. A folding playyard, crib, or the like device, as claimed in claim 1, wherein the two legs at one end of the frame carry

- (a) rollers for rotation about axes extending transversely to the longer sides of the frame, when unfolded, whereby the device can be rolled in the direction of the longer sides of said frame.

3. A folding playyard, crib, or like device, as claimed in claim 1 wherein

- (a) said legs are telescopic, whereby the height of the floor of the device above the bottom ends of the legs can be adjusted, and

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- (b) having means for securing the legs in any adjusted position.
4. A folding playyard, crib, or the like device, comprising
- (a) a rectangular shaped frame having two short and two long sides, said frame comprising 5
 - (b) two rigid, generally U-shaped frame members disposed with the ends of one member adjacent the ends of the other member, the bight portions of said frame members forming the longer sides of said frame and the leg portions of both said U-shaped frame members forming parts of both shorter sides of said frame, 10
 - (c) two pairs of legs,
 - (d) one pair of legs being pivotally interconnected adjacent their upper ends with one frame member and the other pair of legs being pivotally interconnected adjacent their upper ends with the other frame member, 15
 - (e) the two legs of each pair being disposed, respectively, at opposite shorter sides of the frame, 20
 - (f) the two legs at each shorter side of the frame being pivotable toward one another in folding the device and being pivotable away from one another in unfolding it, 25
 - (g) a brace connecting the two legs at each shorter side of the frame to one another to hold the legs in extended, unfolded position,
 - (h) a brace connecting one leg of one pair of legs to one of the frame members, and a brace connecting one leg of the other pair of legs to the other frame member, to hold the frame members in unfolded position, 30

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- (i) a bar rigid with each pair of legs and connecting the two legs of a pair, the two bars being parallel and extending in the direction of the longer sides of said frame,
 - (j) a single-piece floor positioned to rest on said bars when the legs at the two shorter sides of the frame are pivoted apart, and
 - (k) a flexible skirt connected at its upper end to said frame around the perimeter thereof, and at its lower end around said floor.
5. A folding playyard, crib, or like device, as claimed in claim 4, wherein the two legs at one shorter side of the frame carry
- (a) rollers for rotation about axes extending transversely to the longer sides of the frame, when unfolded, whereby the device can be rolled, for transportation, in the direction of the longer sides of the frame.
6. A folding playyard, crib, or like device, as claimed in claim 4, wherein
- (a) said legs are telescopic, whereby the height of the floor of the device above the bottom ends of the legs can be adjusted, and
 - (b) having means for securing the legs in any adjusted position.

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