July 28, 1959 H. J. LANDRY 2,896,224

CONVERTIBLE FOLDING PLAY-YARD

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FIG. 1

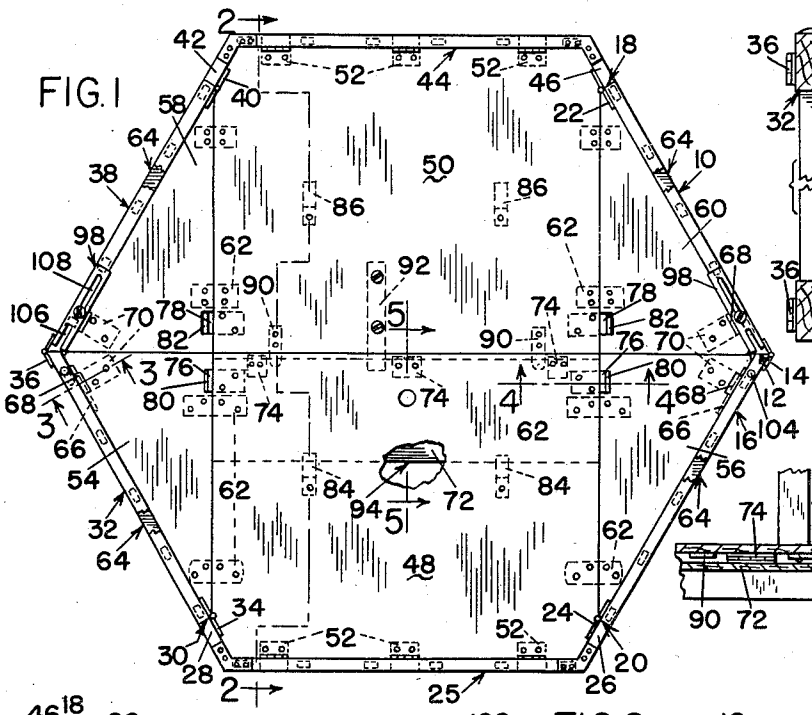


FIG. 3

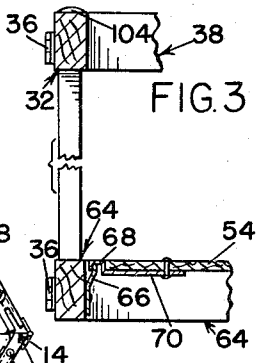


FIG. 4

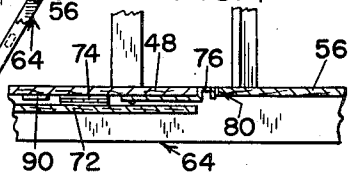


FIG. 2

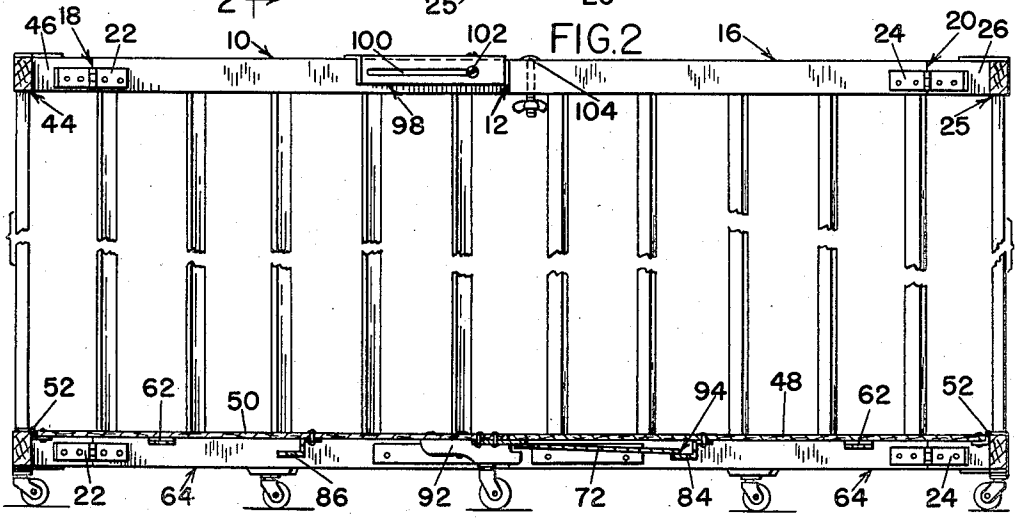
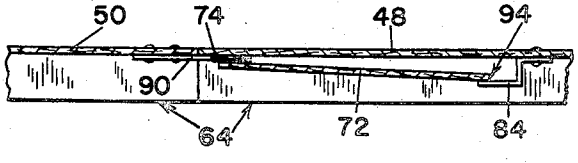


FIG. 5



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FIG. 6

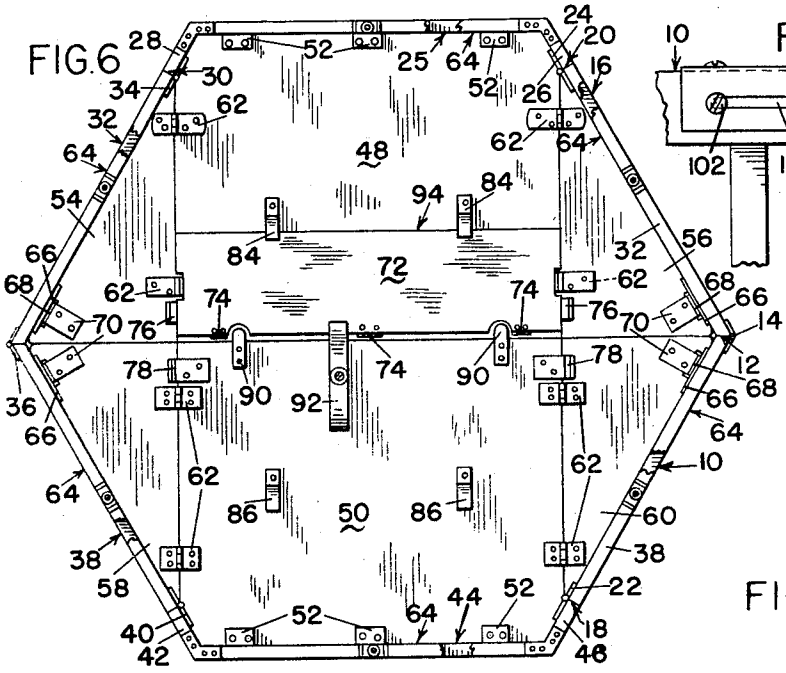


FIG. 8

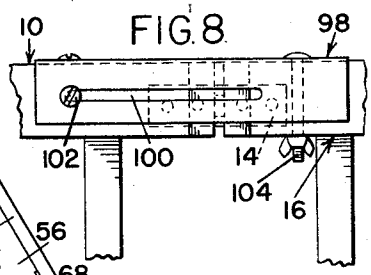


FIG. 9

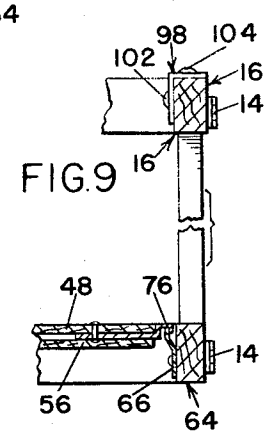
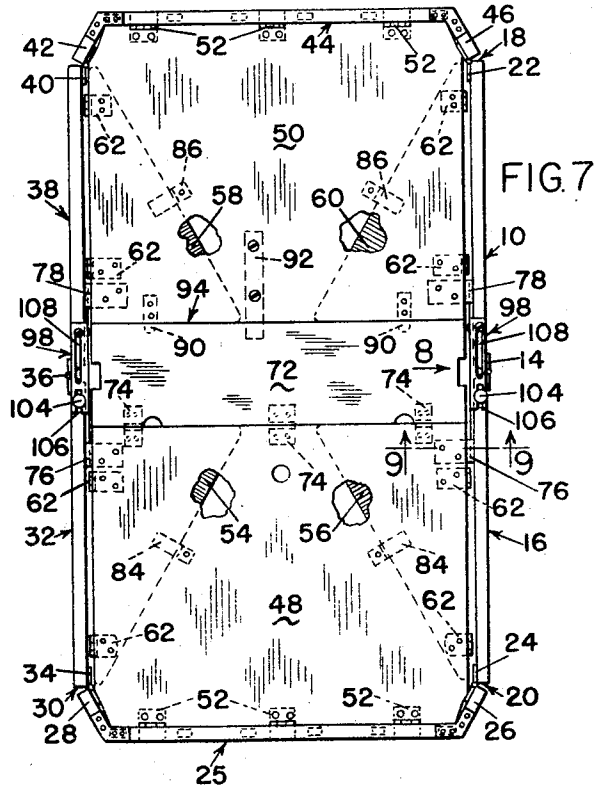


FIG. 7



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FIG. 10

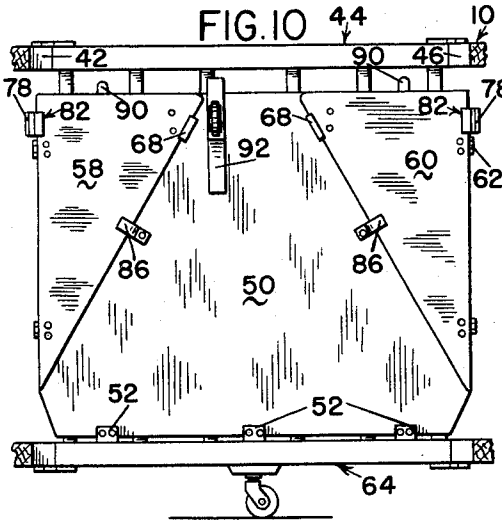


FIG. 11

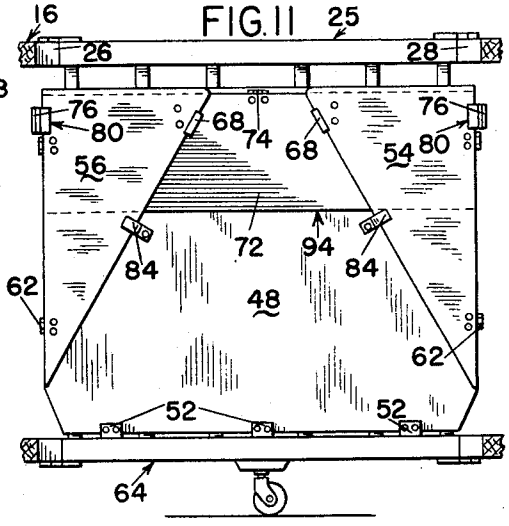


FIG. 12

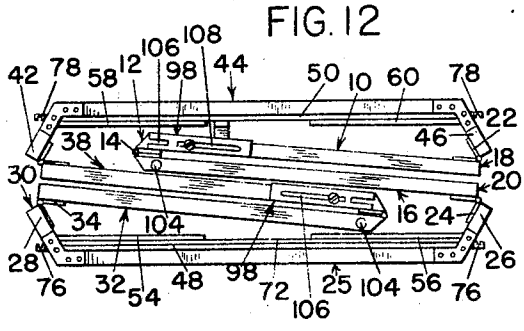


FIG. 13

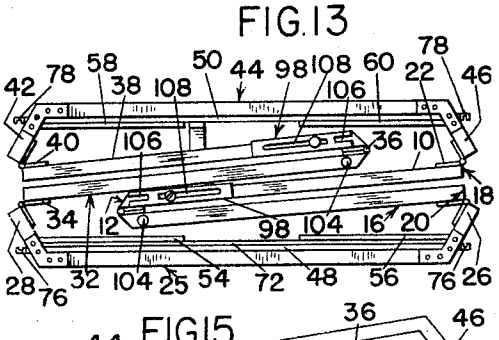


FIG. 14

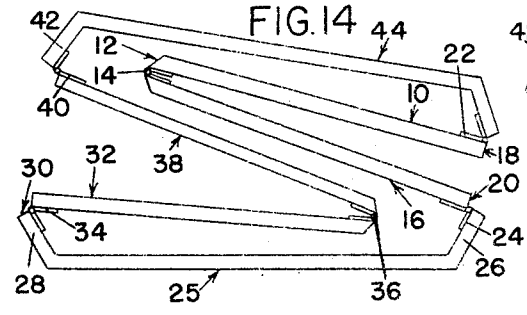
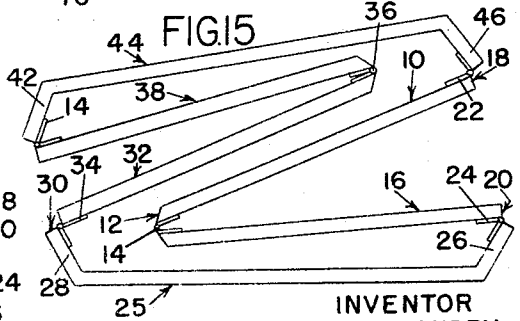


FIG. 15



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United States Patent Office 2,896,224 Patented July 28, 1959

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CONVERTIBLE FOLDING PLAY-YARD

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Application November 19, 1956, Serial No. 623,191

7 Claims. (Cl. 5—99)

This invention relates to a new and improved folding play-yard which is convertible to different shapes or outlines as to the floor plan and railing or fence thereof, and in the particular case illustrated includes a construction which may be varied from a six-sided play-yard to a rectangular play-yard without adding or subtracting parts thereto to make the changes, as well as being foldable into a very small volume.

Another object of the invention resides in the provision of a six-sided play-yard which has a folding floor and is easily folded and stored in a very small space but wherein the outside wall of the play-yard which confines the infant is continuous and articulated so that it cannot be taken apart and the floor is so made as to enable the folding thereof without the necessity of disrupting or disconnecting the wall in any way.

Another object of the invention resides in the provision of a convertible play-yard which may assume either of two different forms and yet which is easily foldable into compact shape for storage, wherein the construction is such that the folded shape and volume of the play-yard is the same regardless of the extended-for-use condition thereof; and the provision of a play-yard as above stated which is foldable in two different ways but in which the shape and volume of the folded yard is the same regardless of the way it is folded.

Still further objects of the invention reside in the provision of a convertible folding play-yard which may include a six-sided floor plan and side walls and which is very sturdy and strong and including means whereby two pairs of opposite sides of the six-sided figure may be rigidly secured together to provide a longer, narrower rectangular play-yard.

It is to be understood that the play-yard of the present invention is provided with upper and lower spaced horizontal rails in each side wall thereof, said rails being connected with the usual spindles in order to form a continuous walled piece of furniture and connected as will be described below with floor parts which are folding in nature with respect to said side walls in order to provide a folding play-yard.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which

Fig. 1 is a plan view of the invention showing the same unfolded ready for use in one form, parts being broken away;

Figs. 2, 3, 4 and 5 are enlarged sectional views on the respective lines in Fig. 1;

Fig. 6 is a bottom plan view of the play-pen as shown in Fig. 1;

Fig. 7 is a plan view of the play-pen shown unfolded ready for use in a different form, parts being broken away;

Fig. 8 is a fragmentary view, looking in the direction of arrow 8, Fig. 7;

Fig. 9 is an enlarged section on the line 9—9 in Fig. 7;

Figs. 10 and 11 are vertical sectional views through the play-pen showing the respective floor units in folded condition;

Figs. 12 and 13 are plan views showing the play-pen folded in each of two different ways respectively; and

Figs. 14 and 15 are diagrammatic views illustrating two ways of folding the play-yard side walls.

Referring now to Fig. 1, the play-pen of the present invention is shown as provided with six separate sides. One of these sides is indicated generally at **10** and is provided at one end thereof with a miter at **12**, there being provided outside hinges **14** at this corner for connection to a similar but reversed or complementary side wall generally indicated at **16**. It will be seen that the miter at **12** and the hinges at **14** provide that the walls **10** and **16** may be folded inwardly but they are prevented from folding any farther outwardly and are firmly located in the position shown.

The opposite ends of both walls **10** and **16** are provided with square cut ends **18** and **20** respectively. At these ends, the side walls are provided with hinges **22** and **24** which are shown as flatly extended, and it will be appreciated that the hinges **24** allow walls **10** and **16** to swing inwardly but not outwardly.

For convenience, the wall **25** may be referred to as the front wall of the play-pen. This wall is provided with angularly-extended ends **26** and **28** which conjoin with the square cut ends of the next adjacent side walls, one being indicated at **20** as to wall **16** and at **30** with respect to the side wall generally indicated at **32**. Side wall **32** corresponds to but is opposite to side wall **16**.

Side wall **32** is provided with hinges **34** connecting it to the in-turned end **28** in the same manner that hinges **24** connect wall **16** to the end **26**. Wall **32** is also provided with the hinges **36** which are similar to but reversed with respect to hinges **14**, and this connects wall **32** to a wall generally indicated at **38** similar to but reversed with respect to wall **10**.

The opposite end of wall **38**, which is square cut similarly to that at **18**, is provided with hinges **40** connecting the same to the inclined end **42** of the rear wall generally indicated at **44**, and the rear wall **44** is provided with the opposite inclined end **46** which is joined by hinge **22** to the square cut end of the wall.

Hinged to front wall **25**, there is provided a square or rectangular floor-piece indicated at **48**, and wall **44** has a similar complementary floor-piece **50**. These floor-pieces are connected to their respective walls by the usual hinges indicated at **52**.

Each floor part **48** and **50** is mitered at the corners adjacent the inclined end portions **26**, **28**, **42** and **46** in order to accommodate these portions, it being noted that the width of the floor-pieces **48** and **50** is greater than the width of the front and rear walls between the inclined end portions, and substantially equals the length of the front and rear walls between the ends of the inclined end portions.

Each floor-piece **48** and **50** is provided with a pair of side wings and these are indicated at **54**, **56**, **58** and **60**. These side wings are pivoted to the rectangular floor-pieces by conventional offset leaf hinges as at **62**. The side wing pieces are generally triangular and are not connected in any way to the other sides or walls of the play-pen. However, they may be supported on the lower rails generally indicated at **64** in Fig. 2 by means of plates **66** receiving the flat hooked ends **68** of plates **70** attached to the lower surfaces of the triangular wing members as clearly shown in Fig. 3.

One square or rectangular floor member **48** or **50**, in this case shown as member **48**, is provided with an ex-

tension floorpiece indicated at **72** which is hinged to the free end of floor member **48** by conventional hinges **74**. It is to be understood that the floor hinges described are located substantially underneath the floor elements and do not appear at the top of the floor. Also, the floor parts **48** and **50** are provided with flat hooked members **76** and **78** respectively which are similar to those at **68** and are received in apertures **80** in the floor members **54** and **56**. The same is true as to the rectangular floor member **50** as at **82**. These hooks are co-planar with the floor members and also with the hook members **68** and they have no function in the form of the invention shown in Fig. 1.

Appropriate stepped pivoting latches which are generally indicated at **84** and **86** (see Figs. 2 and 5) are provided to hold the floor parts **72**, **54**, **56**, **58** and **60** in folded condition as shown in Figs. 10 and 11. In Fig. 11, it is to be noted that the floor parts **54** and **56**, being in-folded and held in place by their pivoting latches **84** (Fig. 7) also may hold in place in folded position floor part **72**, merely by overlapping the same.

Referring now to Fig. 1, the play-pen is shown in operative position but the floor part **72** is held by the pivoted latches **84** in un-used folded condition under its respective floor part **48**. The play-pen is completely extended and it is to be particularly noted that all of the floor parts are solidly supported in a horizontal plane.

In order to fold the play-pen, one main floor member such as **48** is pivoted upwardly about its hinges and the triangular floor members **54** and **56** hinged thereto are in-folded and held by the respective pivoted latches **84** as above described. These latches are used to hold the floor part **72** folded at the same time, see Fig. 11.

The opposite floor part **50** is then folded up and the triangular floor parts **58** and **60** are in-folded as described and shown in Fig. 10. Thereupon the side walls **32** and **38** may be swung in and brought adjacent to front wall **25**, and side walls **10** and **16** are in-folded to overlie folded walls **32** and **38** as shown in Fig. 12.

It is to be emphasized, however, that this is not the only way that the play-pen folds but as shown in Fig. 13, the combined walls **10** and **16** may underlie the walls **32** and **38** as shown in Fig. 13, see also Figs. 14 and 15.

In any event, the important function derived from the construction of the folding play-pen above described resides in the fact that the six-sided play-yard is foldable into a very small space which is much shorter than the length of the usual folding play-yard. It may be folded and placed in even a small closet which cannot be done with the usual play-yard. In addition, the folding play-yard of the present invention is provided with continuous articulated side walls which do not need to be and cannot be disengaged in any respect whatsoever, and therefore they provide a much safer play-yard. The occupant is unable to disengage one wall from another and thus escape, but is always safely held within the side walls even though the play-pen is completely foldable and is provided with a large area due to its shape.

Referring now more particularly to Fig. 7, the construction of the play-pen here is exactly the same as above described but illustrates how it may be folded into an elongated rectangular play-yard having a completely different shape from that shown in Figs. 1 and 6. In the form of the device as shown in Fig. 7, the play-yard has a lateral dimension small enough to allow the same to be trundled through the ordinary doorway and it is pointed out that neither the six-sided play-yard nor the conventional square play-yard can be moved through a door while still maintaining the floor in horizontal position.

In Fig. 7, the triangular floor parts **54** and **56** are in-folded under the rectangular part **48** and are held in this position by the pivoted catches **84**. The floor part **72** is extended and is held horizontal by a pair of lugs **90** and a center post **92** which are attached to the under side of the floor part **50**, supporting the free edge at **94** of the central extension floor part **72**.

The triangular floor parts **58** and **60** are folded under floor part **50** and are held in this folded position by the pivoted latches **86**.

The floor parts **48** and **50** are firmly supported at their edges by means of the plates described above, and indicated at **76** and **78**, and they rest on plates **66** (see Fig. 9) to hold the entire floor solidly in the extended position of Fig. 7.

There is also provided at each side of the play-yard a sliding latch generally indicated at **98** for the purpose of rigidly securing wall portions **10** to **16** and **32** to **38**. This latch is best shown in Fig. 8 wherein it is shown as of angle form, being provided with an elongated side slot **100** guided by a headed fastener **102** in its sliding action between positions wherein it is completely received on the respective walls **38** and **10**; or selectively is moved into overlapping position with the ends of walls **32** and **16** to rigidly secure the same together by means of headed fasteners **104** working in top slots **106**. Other guide slots **108** may be utilized if desired in order to make the sliding action more positive.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A folding play-yard comprising a plurality of side wall sections and a plurality of floor parts pivotally associated with the respective side wall sections, said floor parts being foldable against the side wall sections and said side wall sections being foldable in order to fold the entire play-yard, certain of said side wall sections being arranged in angular relation with respect to each other in one extended condition of the yard, releasable means to hold said certain side wall sections in aligned relation with the play-yard extended in a selected different shape, said floor parts being movably associated with each other to form a floor for the play-yard in either selected play-yard shape.

2. A folding play-yard comprising a plurality of articulated side wall sections and a plurality of folding floor parts pivotally associated with the respective side wall sections, said side wall sections being foldable to fold the entire play-yard, certain of said side wall sections being angularly arranged with respect to each other in one extended condition of the yard, and releasable latch means to hold said certain side wall sections in parallel, aligned extension of each other with the play-yard extended in a different selected shape as to the floor plan thereof, certain of said floor parts being swingable with respect to adjacent floor parts for conversion of the play-yard floor from one shape to the other.

3. A folding convertible play-yard comprising a plurality of articulated side walls and a plurality of folding floor parts pivotally associated with the respective side wall sections, certain of said side walls being angularly arranged with respect to each other in one extended condition of the yard, latches to hold said side walls in aligned extension of each other with the play-yard extended in a different shape as to the floor plan thereof, certain different floor parts being swingable under adjacent floor parts in one form of the extended play-yard, and releasable means to hold the swung under floor parts in position.

4. A folding convertible play-yard comprising a series of articulated side walls and a plurality of folding floor parts pivotally associated with the respective side wall sections, said floor parts being extensible to form selectively at least two separate and different shaped floor plans, the floor parts holding the side walls at angles to each other in one floor plan of the yard, and separate means holding certain of said side walls in aligned extension in another floor plan, said floor parts forming the floor in both plans.

5. The play-yard of claim 4 wherein the one floor plan is six-sided and the other floor plan is rectangular.

6. A folding convertible play-yard comprising a series

of articulated side walls and a plurality of folding floor parts, said floor parts being movably associated with respective side walls, said floor parts being extensible to form selectively at least two separate and different shaped floor plans, the floor parts holding certain of the side walls at angles to each other in one floor plan of the yard, and separate means holding said certain side walls in aligned extension in another floor plan, the latter floor plan being generally rectangular, others of said side walls having end portions extending generally toward each other and the certain side walls extending between and connected to the outermost end portions of said side wall ends.

7. A folding play-yard comprising a plurality of side walls and a plurality of folding floor parts, said floor parts being movably associated with respective side walls, a pair of said side walls located opposite each other, a fixed, short angularly arranged extension at each end of each of said opposite side walls, said extensions extending at angles toward the other side wall of the pair, certain others of said side walls being hingedly secured to the extensions of the first-named pair of side walls in hinged relationship therewith, said side walls cooperating to form selectively a rectangular or selectively hexagonal enclosure, and the floor parts selectively aiding in maintaining the side walls in either position.

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