Aug. 22, 1967 R. LERNER 3,336,608

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Fig. 5.

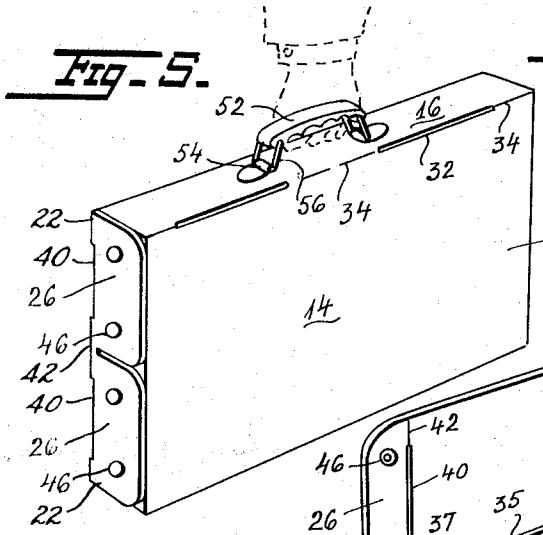


Fig. 3A.

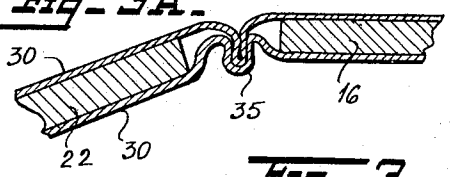


Fig. 3.

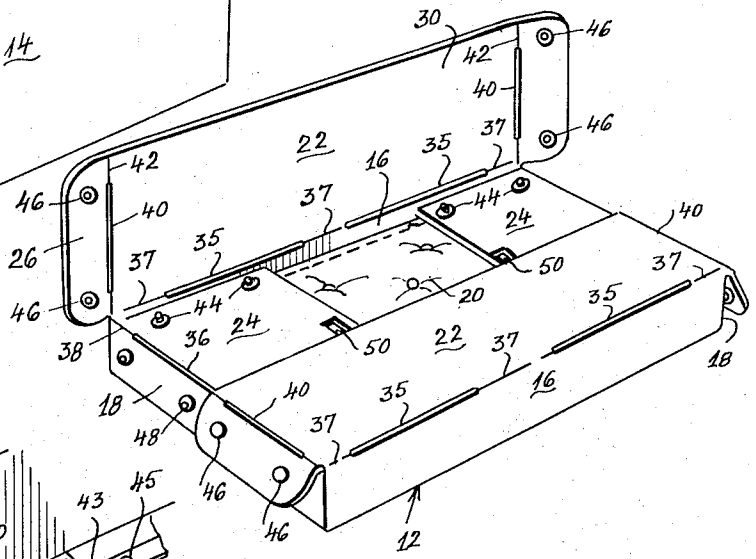


Fig. 4.

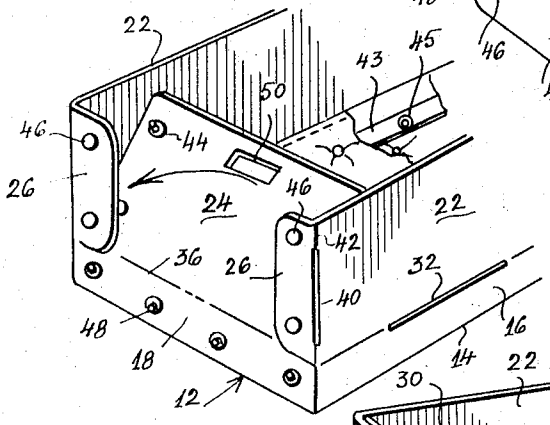


Fig. 1.

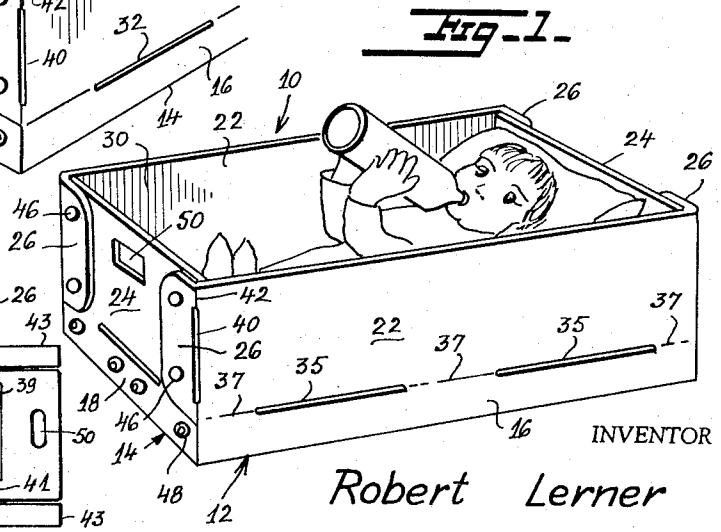
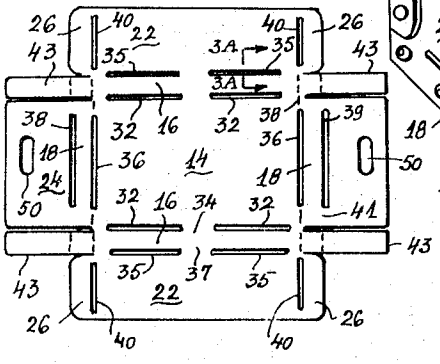


Fig. 2.



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Fig-7.

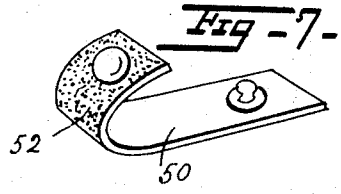
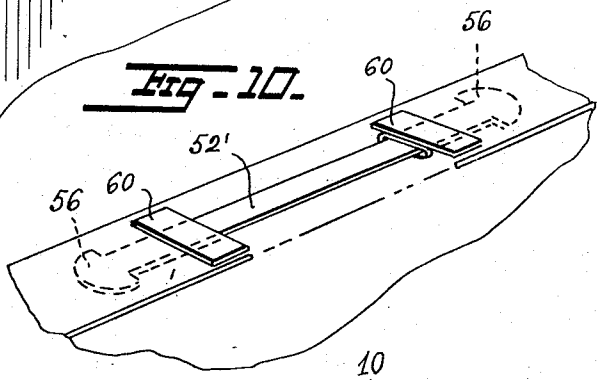


Fig-11.

Fig-10.



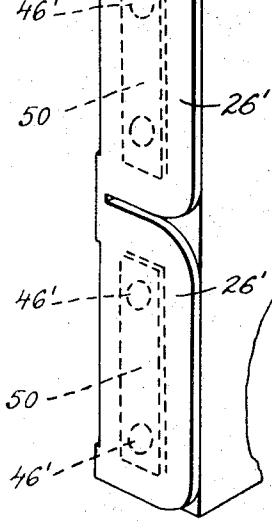


Fig-6.

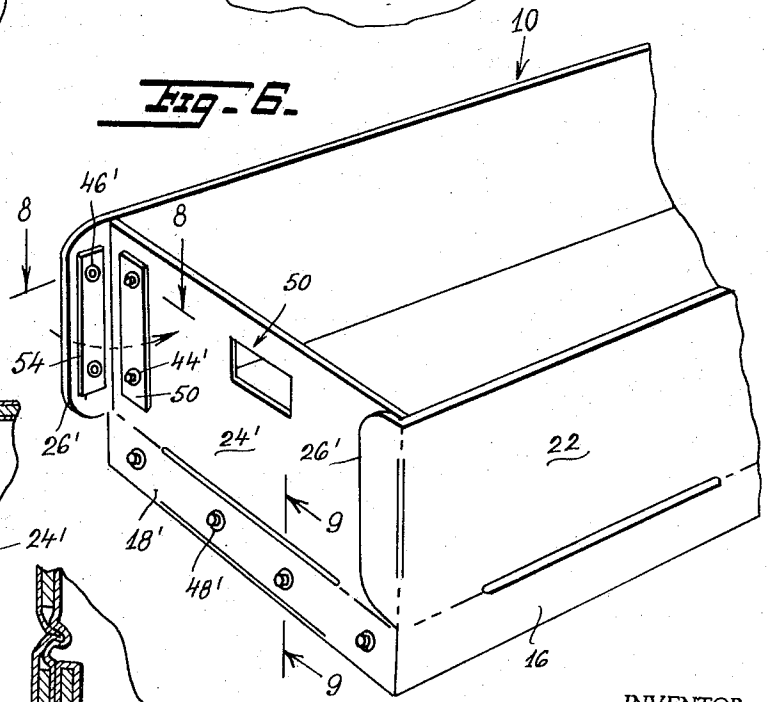


Fig-8.

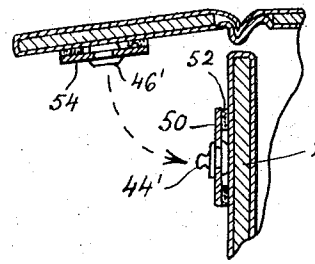
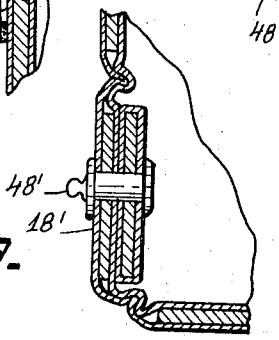


Fig-9.



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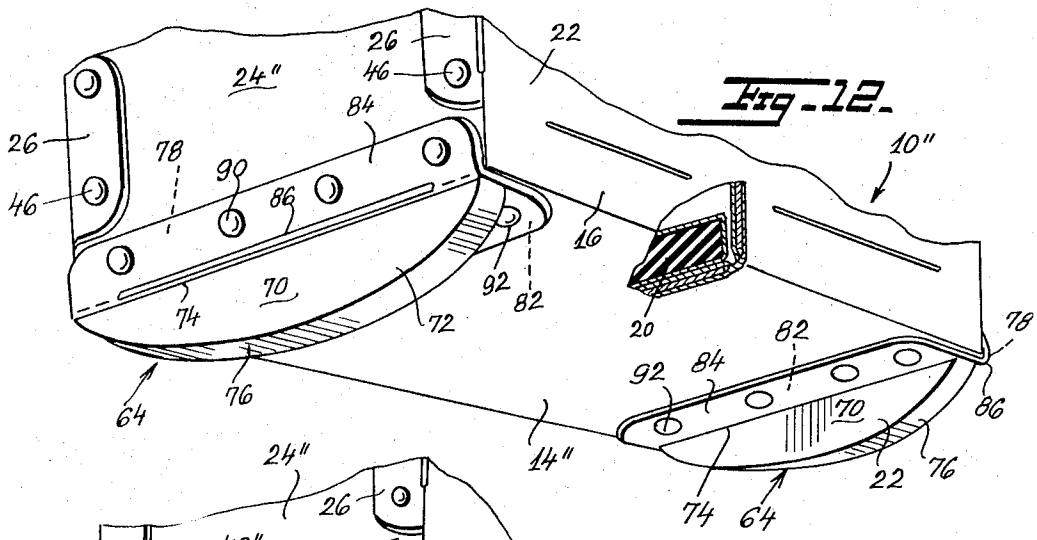


Fig-12.

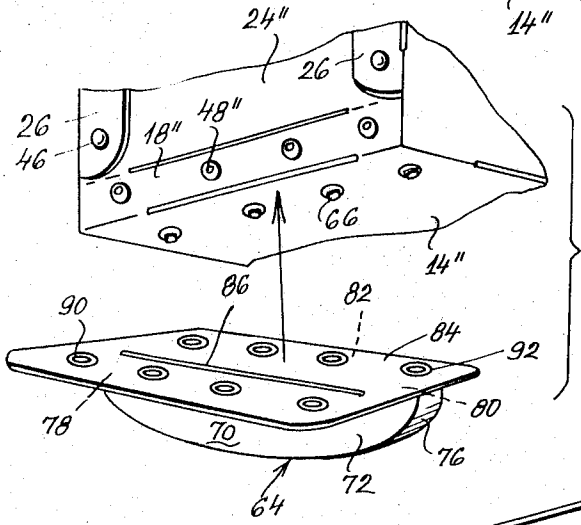


Fig-13.

Fig-14.

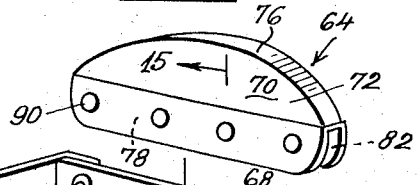
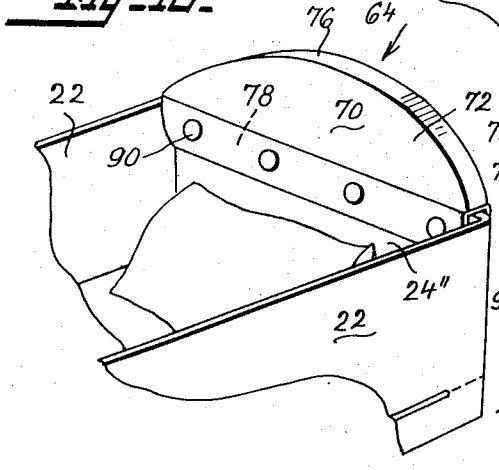


Fig-16.



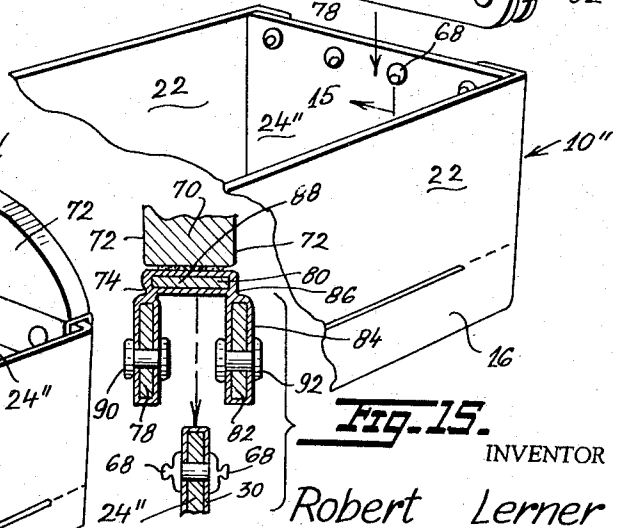


Fig-15.

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PORTABLE COLLAPSIBLE CRIB

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Filed Jan. 13, 1966, Ser. No. 520,335
2 Claims. (Cl. 5—99)

ABSTRACT OF THE DISCLOSURE

A shallow rectangular baby crib with bottom, side and end walls and a pair of collapsible and extensible side flaps and end flaps adapted to be erected and joined providing a compartment for a baby and adapted to be collapsed and joined for storage and transportation. A flexible plastic skin covers the walls and flaps. A handle is provided for carrying the crib when collapsed and a mattress for supporting the baby in the crib.

This invention relates to new and useful improvements in a baby's crib.

A primary object of the present invention is to provide a baby's crib that is collapsible into a compact mass for readily transporting the crib, that is simple in construction, attractive in appearance and that can be manufactured and sold at a reasonable cost.

A specific object of the invention is to provide a crib with hinged side and end flaps wherein the hinges are formed by the material of the cover of the crib.

Another object according to a modification is to provide a baby's crib with rocker members for rocking the crib, the rocker members being detachable and adapted to be mounted on the body of the crib for enhancing the appearance of the crib.

For further comprehension of the invention and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIGURE 1 is a top perspective view of a crib embodying one form of the invention, a baby being shown therein.

FIG. 2 is a top plan view of the blank from which the crib of FIG. 1 is formed.

FIG. 3 is a top perspective view of the crib partly collapsed.

FIG. 3*a* is a sectional view taken on the line 3*a*—3*a* of FIG. 2.

FIG. 4 is a top perspective view of one end of the crib showing the end flap partly collapsed.

FIG. 5 is a perspective view of the crib fully collapsed.

FIG. 6 is a fragmentary perspective view of a crib embodying a first modified form of the invention.

FIG. 7 is a perspective view of the handle of the crib of FIG. 6 shown flattened out.

FIG. 8 is a detail top perspective view of the mounting strip for the snap elements.

FIG. 9 is a top perspective view of one end of a crib embodying a second modified form of the invention.

FIG. 10 is an enlarged sectional view taken on the line **10**—**10** of FIG. 9.

FIG. 11 is an enlarged vertical sectional view taken on the line **11**—**11** of FIG. 9.

FIG. 12 is a bottom perspective view of a fragment of a crib embodying a third modified form of the invention, parts being shown broken away and parts in section.

FIG. 13 is a disassembled bottom perspective detail view of one end of the crib of FIG. 12.

FIG. 14 is a top perspective view of one end of a crib embodying a fourth modified form of the invention, showing the runner in detached position.

FIG. 15 is a vertical sectional view taken on the line **15**—**15** of FIG. 14.

FIG. 16 is a view similar to FIG. 14 showing the rocker in attached operative position.

Referring in detail to the various views of the drawings, in FIG. 1 a baby's crib **10** embodying one form of the invention is shown with an infant therein. The crib has a shallow rectangular shaped body **12** composed of a base or bottom panel **14**, side panels **16**, **16** disposed at right angles to the base or bottom panel **14**, and end panels **18**, **18** disposed at right angles to the base or bottom panel **14**. A flexible mattress **20** is removably supported on the top surface of the base or bottom panel **14**.

In accordance with the invention, side flaps **22**, **22** are hingedly connected to the side panels **16**, **16** and end flaps **24**, **24** are hingedly connected to the end panels **18**, **18** thereby providing a relatively deep body capable of supporting and enclosing and protecting an infant as shown in FIG. 1. The side flaps **22**, **22** are formed with integral flap extensions **26**, **26** at both ends overlapping the end flaps **24**, **24**. The panels and flaps are formed of semi-rigid cardboard or semi-rigid plastic material, such as Masonite.

The panels, flaps, flap extensions and straps are covered with or enveloped by a thin flexible plastic skin cover **30** on both opposed surfaces thereof. The hinged connection between the base **14** and the side panels **16** are constituted by folding the flexible plastic skin cover material into semi-oval shape, heating and pressing such folded material thereby forming permanent spaced beads **32** forming hinge structures for the major portion of the juncture between the base **14** and side panels **16**, the remainder of the connection as indicated at **34** being constituted by the smooth flexible material of the cover **30**.

The hinge connection between the side panels **16** and the side flaps **22** are similar to the hinge connection between the base **14** and side panels and comprise beaded structures **35** similar to beads **32** and smooth portions **37** of the cover **30**.

The hinge connection between the base **14** and the end panels **18** are similarly constructed forming single hinge beads **36**, the opposed smooth skin material of the cover constituting the remainder of the hinge connections at the ends as indicated at **38**. The hinge connection between the end panels **18** and the end flaps **24** are similar to the hinge connections between the base **14** and the end panels **18** comprising a single bead structure **39**, the remainder of the connection constituted by the opposed smooth skin material of the cover as indicated at **41**.

The hinge connection between each side flap **22** and its adjacent flap extension **26** is a similarly constructed beaded structure **40** and similar opposed smooth skin material of the cover as indicated at **42**. Rectangular shaped straps **43** formed integrally with the plastic skin material of the cover **30** at the ends of the side panels **16**.

The preformed and covered blank from which the crib **10** is formed is shown in FIG. 2.

Fastening means are provided for securing the flaps and flap extensions in extended operative position as shown in FIG. 1 and in collapsed position for transporting as shown in FIG. 5. For this purpose, male snap fastener elements **44** are suitably secured to the outer surface of the end flaps **24** at the corners thereof, and complemental female snap fastener elements **46** are suitably mounted on the flap extensions **26** for coacting with the male snap fastener elements **44** on the end flaps as best seen in FIG. 4. The snap fasteners **44** and **46** hold the flaps in erected position as shown in FIG. 1. Male snap fastener elements **48** are also mounted along the outer surface of the end

panels **18** for coacting with the female snap fastener elements **46** on the flap extensions **86** for holding the parts in folded collapsed condition as shown in FIG. 5. The straps **43** are folded inwardly over the inner surface of the side panels **16** and secured thereto by rivets **45** for reinforcing the side panels.

Openings **50** are formed in the end flaps **24** adjacent the free end thereof to receive the fingers of the hand of the operator for lifting the crib.

A strap handle **52** is flexibly secured to one of the side panels **16**, for instance, the rear side panel as viewed in FIG. 1 by means of tubular bearing members **54** fixed to the side panel and metal rings **56** pivoted thereto and to the handle **52**.

In FIGS. 6 to 11, inclusive, modified means for mounting the snap fastener elements on the end flaps **24'** and flap extensions **26'** is shown as well as modified means for mounting the strap handle **52'**. Instead of mounting the male snap fastener elements **44'** directly onto the end flaps **24'**, a rectangular plastic strip **50** is fastened on the outer surface of each end flap **24'** at each end thereof by means of adhesive **52** on one surface of the strip. A similar strip **54** is similarly secured to the adjacent flap extension **26'** for carrying female snap fastener elements **46'** for coacting with the snap elements **44'**, when the crib is in erected position as shown in FIG. 6. The snap fastener elements **46'** coact with the male snap fastener elements **48'** on end panels **18'** when the crib is in collapsed condition as shown in FIG. 11.

In FIGS. 12 to 16, inclusive, a fragment of a crib **10''** embodying another modified form of the invention is shown. The crib **10''** differs from crib **10** of FIG. 1 in that rocker members **64** are mounted on the bottom panel or base **14''** of the crib so that the crib may be rocked to and fro on a horizontal supporting surface. The base **14''** is also provided with a series of spaced male snap fastener elements **66** at each end thereof, and each end flap **24''** is provided with a series of spaced snap fastener units **68** with male snap fastener elements on both sides thereof adjacent the top edge thereof.

The rockers members **64**, each comprises a solid block **70** of wood, plastic or other suitable material having flat side surfaces **72**, a flat top edge **74** and a curved bottom edge **76** as viewed in FIG. 12. The flat top edge **74** of the block is fastened to an assembly of three aligned rectangular shaped slats **78**, **80** and **82** of cardboard or Masonite material covered by a thin flexible plastic material **84**, the material of the cover **84** serving as hinges between the slats as indicated at **86**.

The block **70** is fastened to the cover **84** over the intermediate slat **80** by adhesive **88**. A series of snap fastener units **90** is supported by the slat **78** with female snaps positioned on both sides thereof, and similar snap fastener units **92** are supported by the slat **82** with female snaps positioned on both sides thereof.

In assembling, the slat **82** of the slat assembly is placed underneath the base **14''** and fastened to the snap fastener elements **66** on the base by means of the snap fastener elements **92** with the block **70** depending from the base and with the slat **78** upturned and fastened to the snap fastener elements **48''** on the adjacent end panel **18''** by means of the snap fastener elements **90**. The rocker members **64** providing means for rocking the crib to and fro on a horizontal supporting surface.

The rocker members **54** may be readily removed by disengaging the snap fastener elements and when removed may be readily mounted on the top end edge of the end flaps **24''** by folding the end slats **78** and **82** downwardly in parallel spaced relation as seen in FIG. 14 and then inserting the rocker member downwardly as indicated by the arrow in FIG. 14 to position shown in FIG. 16, the hinge connections permitting the slats to be positioned over the edges of the end flaps and the female snap fastener elements on the units **90** and **92** pressed into fastening engagement with the male snap fastener elements **68** on the end flaps. As seen in FIG. 16, the rocker members enhance the appearance of the crib.

In all other respects, the crib **10''** is similar to crib **10** and similar reference numerals are used to indicate similar parts.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

What is claimed is:

1. A baby's crib comprising an elongated rectangular shaped body with a base, side and end panels hingedly connected to the base, the top of the body being open, side and end flaps hingedly connected to the side and end panels, flap extensions hingedly connected to the end of the side flaps, a thin flexible plastic cover enveloping the base, panels, flaps and flap extensions, means for removably securing the panels to each other in erected position, means for removably securing the flap extensions to the side flaps in erected position, means for removably securing the flaps to the end panels in collapsed condition for transportation, a strap handle mounted on one of the side panels, the end flaps having holes forming hand grips for lifting the crib, the mounting for the handle including cross straps on said one side panel, said one side panel having slots therein under the cross straps, the handle having its end slidable in the slots and heads on the end of the handle underneath the cover of the crib, the means for securing the panels to each other in erected position consisting of female snap fastener elements on the flap extensions, and strips on the end flaps adjacent the flap extensions and male snap fastener elements on the strips coacting with the female fastener elements.

2. A baby's crib comprising an elongated rectangular shaped body with a base, side and end panels hingedly connected to the base, the top of the body being open, side and end flaps hingedly connected to the side and end panels, flap extensions hingedly connected to the end of the side flaps, a thin flexible plastic cover enveloping the base, panels, flaps and flap extensions, means for removably securing the panels to each other in erected position, means for removably securing the flap extensions to the side flaps in erected position, means for removably securing the flaps to the end panels in collapsed condition for transportation, rocker members removably mounted on the base at the ends thereof, said members each including a block having a carved bottom edge, a slat assembly connected to the top edge of the block, said assembly including three aligned slats, a plastic flexible cover over said slats hingedly connecting the slats, female snap fastener elements carried by the end slats, the fastener elements of one slat detachably connected to the male fastener elements on the base adjacent its end, the fastener elements of the other slat detachably connected to male fastener elements on the base adjacent its end, the fastener elements of the other slat detachably connected to the male snap fastener elements on the adjacent end panel, said rocker members adapted to be detachably mounted on the top edge of the end flaps when removed from the base.

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CASMIR A. NUNBERG, *Primary Examiner.*