Nov. 30, 1954 A. W. KUNZ 2,695,412

COLLAPSIBLE CRIB

Filed Oct. 20, 1950 2 Sheets-Sheet 1

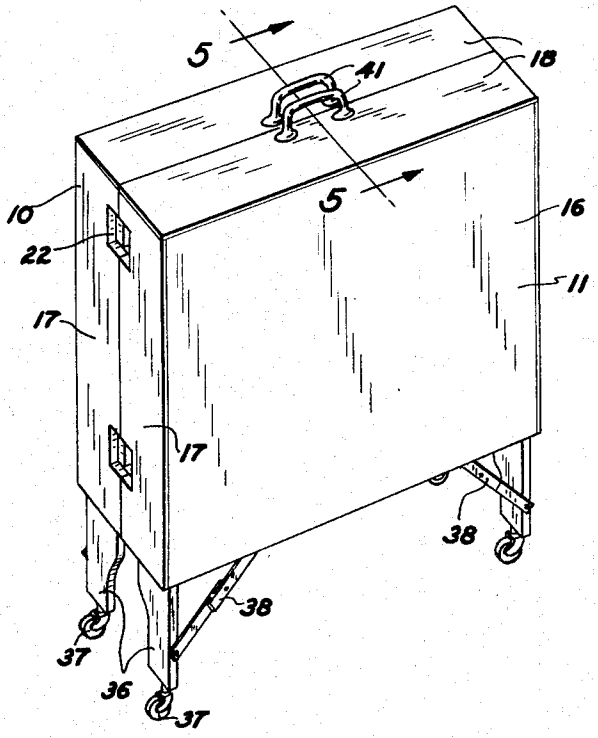


FIG. 1

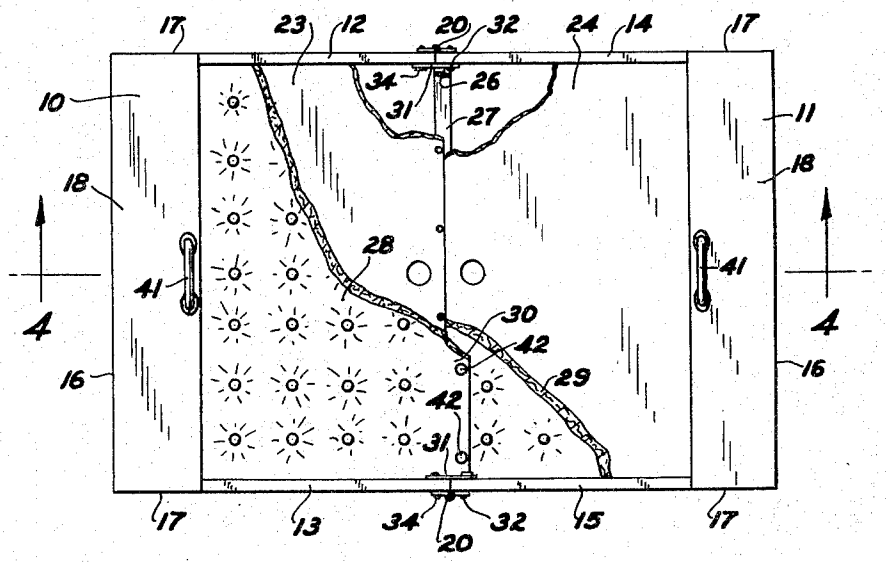


FIG. 2

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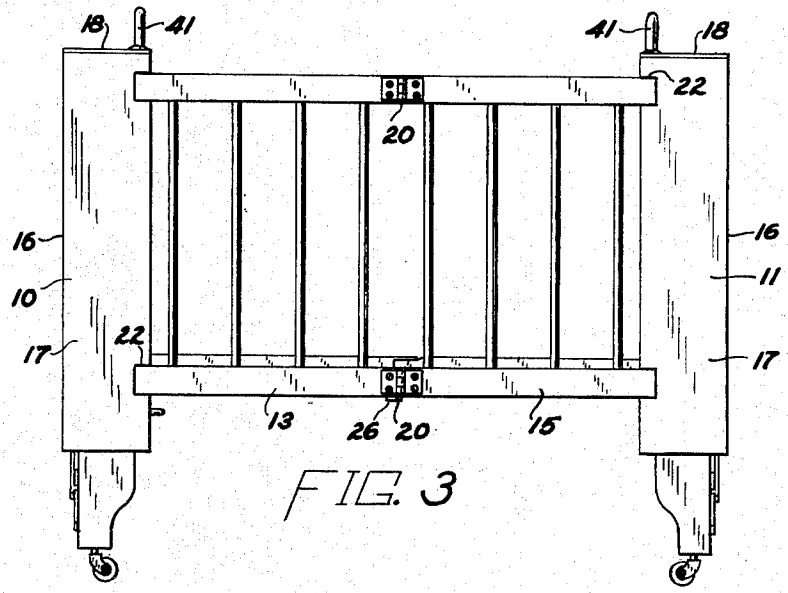


FIG. 3

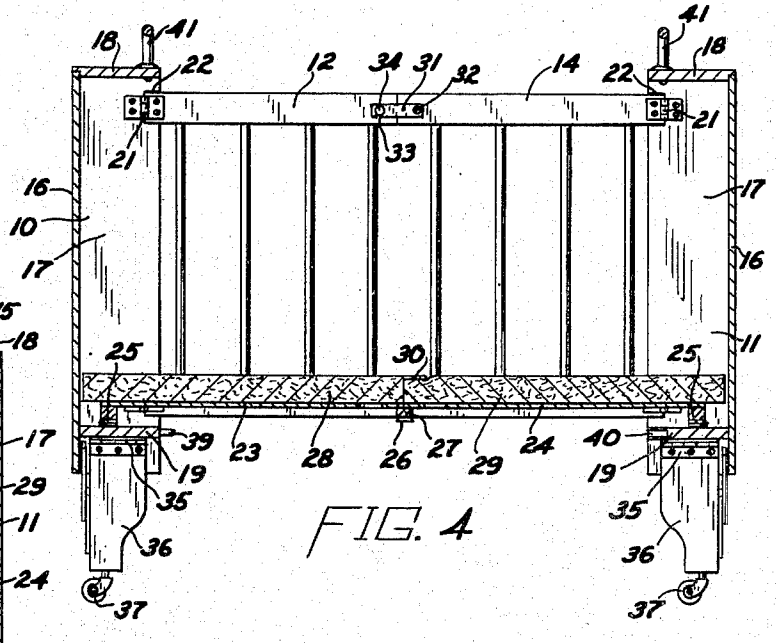


FIG. 4

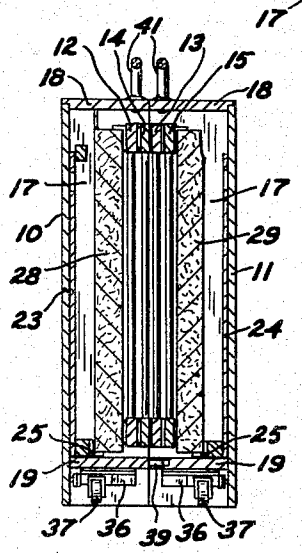


FIG. 5

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COLLAPSIBLE CRIB

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2 Claims. (Cl. 5—99)

The invention herein presents a collapsible crib. Its object is to provide a collapsible crib of simple, practical, novel and improved construction.

In the accompanying drawings forming a part of this specification,

Fig. 1 is a perspective view of a collapsible crib made according to the invention as when in folded condition;

Fig. 2 is an enlarged top plan view, partially in section and partially broken away, showing the collapsible crib as when in condition for use;

Fig. 3 is a side elevational view of said collapsible crib, on the scale of Fig. 2, as when in condition for use;

Fig. 4 is a central vertical longitudinal sectional view, taken on line 4—4 in Fig. 2; and

Fig. 5 is a central vertical transverse sectional view, taken on line 5—5 in Fig. 1, with supporting legs for the collapsible crib in folded condition.

A frame of the collapsible crib includes end frame members, denoted **10** and **11**, respectively, and side frame members, indicated **12, 13, 14** and **15**, respectively.

Each of the end frame members **10** and **11** consists of an upstanding transversely extending end wall **16**, upstanding longitudinally extending side walls, designated **17, 17**, at the opposite sides of, rigid with and projecting inwardly from said upstanding transversely extending end wall **16**, a horizontal top wall **18** at the upper ends of, extending inwardly from and rigid with the upper ends of the walls **17, 16, 17**, and a horizontal bottom wall **19** adjacent the lower ends of, extending inwardly from and rigid with lower end portions of said walls **17, 16, 17**. All of the walls **16, 17, 18** and **19** of each end frame member are of rectilinear configuration, the side walls **17, 17** of each end frame member are parallel, inner edges of the top and bottom walls **18** and **19** and the side walls **17, 17** of each end frame member terminate in a single vertical plane disposed transversely of the collapsible crib, the side walls of the different end frame members which are at the same side of the collapsible crib are in alinement longitudinally thereof, and the end walls of the different end frame members are in parallel relation.

The side frame members **12, 13** and **14, 15**, respectively, are in alinement transversely of the collapsible crib, as well as in the horizontal plane of the end frame members **10** and **11**. As disclosed, the upper ends of all of the side frame members terminate in a single horizontal plane below the upper ends of the end frame members, and the lower ends of all of said side frame members terminate in a single horizontal plane above the lower ends of said end frame members.

The side frame members **12, 14** and **13, 15**, respectively, are situated between side walls **17, 17** of the different end frame members **10** and **11** at the corresponding side of the collapsible crib, and inner edges of said side frame members **12, 14** and **13, 15** are hingedly connected, as at **20**, to be relatively swingable on vertical axes in a horizontal plane. An outer edge of each of the side frame members **12, 13, 14** and **15** adjacent an inner vertical edge of the side wall **17** at the corresponding corner of the collapsible crib is hingedly connected thereto, as at **21**, for swinging movement of said side frame members relative to the end frame members on vertical axes in a horizontal plane. Inner edge portions of the side walls **17** are cut away, as at **22**, at the locations of the hinges **21**. Hinges **20, 20** and sets of hinges **21, 21** at the same side of the collapsible crib are in vertical alinement, and

sets of hinges **20, 20** and **21, 21** at the opposite sides of said collapsible crib are in transverse alinement.

The construction and arrangement will be such that the side frame members can be swung inwardly and outwardly upon the hinges **21** relative to the hinges **20** from unfolded positions for said side frame members, as in Figs. 2, 3 and 4, to folded positions for the side frame members, as in Figs. 1 and 5.

Each of the rectilinear supporting elements, denoted **23** and **24**, respectively, of the collapsible crib has its outer end hingedly supported, as at **25**, upon an upper surface of the bottom wall **19** of the end frame member at the corresponding end of said collapsible crib for swinging movement in a vertical plane between horizontal and vertical positions. Lower, inner edge portions of the side frame members **14** and **13** rigidly support horizontal interiorly extending arms, indicated **26, 26**, adapted to lie beneath the opposite ends of a transverse bar **27** rigid with the lower surface of the inner, free end portion of the supporting element **23** when this is horizontally disposed and the side frame members are in unfolded position. A side edge portion of the transverse bar **27** projects inwardly beyond the inner, free end of said supporting element **23** thus to lie beneath the inner, free end portion of the supporting element **24** when this is horizontally disposed while said side frame members are in unfolded position. The construction and arrangement will be such that the inner, free ends of the supporting elements **23** and **24** will be in proximate relation when the transverse bar **27** is rested upon the horizontal arms **26, 26** and the inner, free end portion of the supporting element **24** is rested upon said transverse bar, with said supporting elements in a single horizontal plane, as disclosed very clearly in Fig. 4 of the drawings. Each of the rectilinear supporting elements **23** and **24** has width substantially to span the distance between the side walls **17, 17** of the end frame members. The construction and arrangement will be such that said supporting elements **23** and **24** can be swung from alined, horizontal positions as in Figs. 2, 3 and 4 to vertical positions as in Fig. 5.

Rectilinear mattresses, represented as **28** and **29**, respectively, are removably restable upon the supporting elements **23** and **24** in such manner that a flap **30** upon an upper portion of the inner end of the mattress **28** overlies an inner edge portion of the upper surface of the mattress **29**. The mattresses **28, 29** have width substantially equal to the width of each of the supporting elements **23, 24**, said mattresses are of overall length substantially to span the distance between the end walls **16, 16** of the end frame members when the collapsible crib is in unfolded condition, and the upper surfaces of the mattresses are to lie in a single horizontal plane when said mattresses are rested upon the supporting elements **23** and **24**. Fasteners **42** are for securing the flap **30** to the mattress **29**.

The side frame members **12, 14** and **13, 15**, respectively, are in alined relation when the collapsible crib is in unfolded condition, and clips, each indicated **31**, are for precluding folding of said side frame members when folding is not intentional. As shown, each clip **31** is pivotally supported at **32** upon an inner end portion of one of the side members and has a notch **33** for engaging a headed pin **34** upon the inner end portion of an adjacent side member. The clips **31** are at the inner sides of the side frame members in alined relation with the hinges **20** transversely of the collapsible crib, and each clip has thickness substantially equal to the length of the corresponding pin **34**. The surfaces of the clips defining their notches **33** fit upon the bodies of the pins back of their heads thus to preclude relative swinging movement of the side frame members when the clips and headed pins are in assembled relation.

The lower surface of the bottom wall **19** of each of the end frame members hingedly supports, as at **35**, supporting legs **36** for the collapsible crib, and the supporting legs in turn support casters **37** at each of the four corners of said collapsible crib. The construction and arrangement will be such that the supporting legs **36** at each end of the crib can be swung toward each other, thus to situate the casters **37** within lower end portions of the end frame members, as in Fig. 5, and away from each

other, thus to situate said casters in supporting relation to said end frame members, as in Figs. 1, 3 and 4. Locking bars **38** are for retaining the supporting legs **36** in upright position. The construction and arrangement desirably will be such that the supporting legs and casters will be frictionally held in the folded position of said supporting legs, as in said Fig. 5, when the collapsible crib is lifted off of a supporting surface therefor.

The manner in which the collapsible crib is made ready for use and is collapsed will be apparent. Before folding of the crib, the mattresses **28** and **29** will be removed, and the clips **31** will be released. In the accomplishment of folding, the supporting elements are swung upwardly from their positions as in Fig. 4 to vertical positions against the end walls of the end frame members, as in Fig. 5. The mattresses can be inserted in said end frame members, as in said Fig. 5, before the crib is collapsed.

With collapsing of the crib, the side frame members are swung inwardly, and the inner edges of the top, side and bottom walls of the different frame end members are engaged, as in Fig. 5. Horizontal dowel pins **39**, disposed longitudinally of the crib when in use, rigid with the interior marginal edge of one of the bottom walls **19** become frictionally engaged in openings **40** alined with said dowel pins in the inner marginal edge portion of the other bottom wall **19** thus to frictionally, detachably retain the end frame members **10** and **11** in fixed relation with completion of collapsing of the crib.

The top wall **18** of each end frame member rigidly supports a handle **41** by means of which the collapsible crib can be carried. The handles **41**, **41** are in parallel relation at the upper sides and adacent the inner edges of the top walls **18**, **18** of the different end frame members so that said handles can be grasped in one hand and the collapsible crib thus transported.

What is claimed is:

1. A collapsible crib comprising first and second end frame members each consisting of an end wall, oppositely disposed, parallel, inwardly extending side walls and spaced top and bottom walls between said side walls and extending inwardly from said end wall, the inner edges of the side walls of each of said end frame members lying in a single plane, a substantially centrally hinged side frame member at each of the opposite sides of said crib having its opposite ends hingedly connected to portions of the side walls of the end frame members at the corresponding side of said crib situated outwardly of said inner edges of said side walls, each of said side frame members forming continuations of and being substantially alined with the side walls, to which it is hingedly connected, when said crib is in unfolded condition and swingable inwardly to cause the crib and the side frame members to be collapsed and the collapsed side frame members to form a partition wall across the open, inner side of each of said first and second end frame members providing first and second storage spaces at opposite sides of said partition wall bounded, respectively, by the partition wall and said first and second end frame members, the inner edges of the side walls of the end frame members, respectively, being in contiguous relation and each of said side frame members lying wholly within a different one of said first and second end frame members in spaced relation to its end wall when said crib is collapsed, first and second mattress supporting elements hingedly secured upon portions of the bottom walls of the first and second end frame members, respectively, situated outwardly of the locations where said side frame members are hinged to said end frame members for swinging movement between an upright position where each of said supporting elements is in one of said storage spaces against the end wall of the corresponding end frame member in spaced relation to the side frame member therein and a horizontal position where the supporting elements are in alined, adjacent relation, and means for retaining said first and second supporting elements in horizontal position when said crib is in unfolded condition.

2. The combination as specified in claim 1, and a carrying handle for said crib upon a top wall of at least one of said end frame members.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
217,716	Walker	July 22, 1879
274,982	Shepard	Apr. 3, 1883
360,556	Bickford	Apr. 5, 1887
1,498,633	Lewis	June 24, 1924
1,675,375	Netschert	July 3, 1928
1,846,673	Brown	Feb. 23, 1932
2,043,072	Schmitt et al.	June 2, 1936
2,224,310	Merrett	Dec. 10, 1940
2,518,904	King	Aug. 15, 1950
2,523,124	Landry	Sept. 19, 1950

FOREIGN PATENTS

Number	Country	Date
929,830	France	July 22, 1947