Oct. 25, 1949. A. F. AMELUNG 2,486,093

FOLDING CRIB

Filed Sept. 24, 1945

2 Sheets-Sheet 1

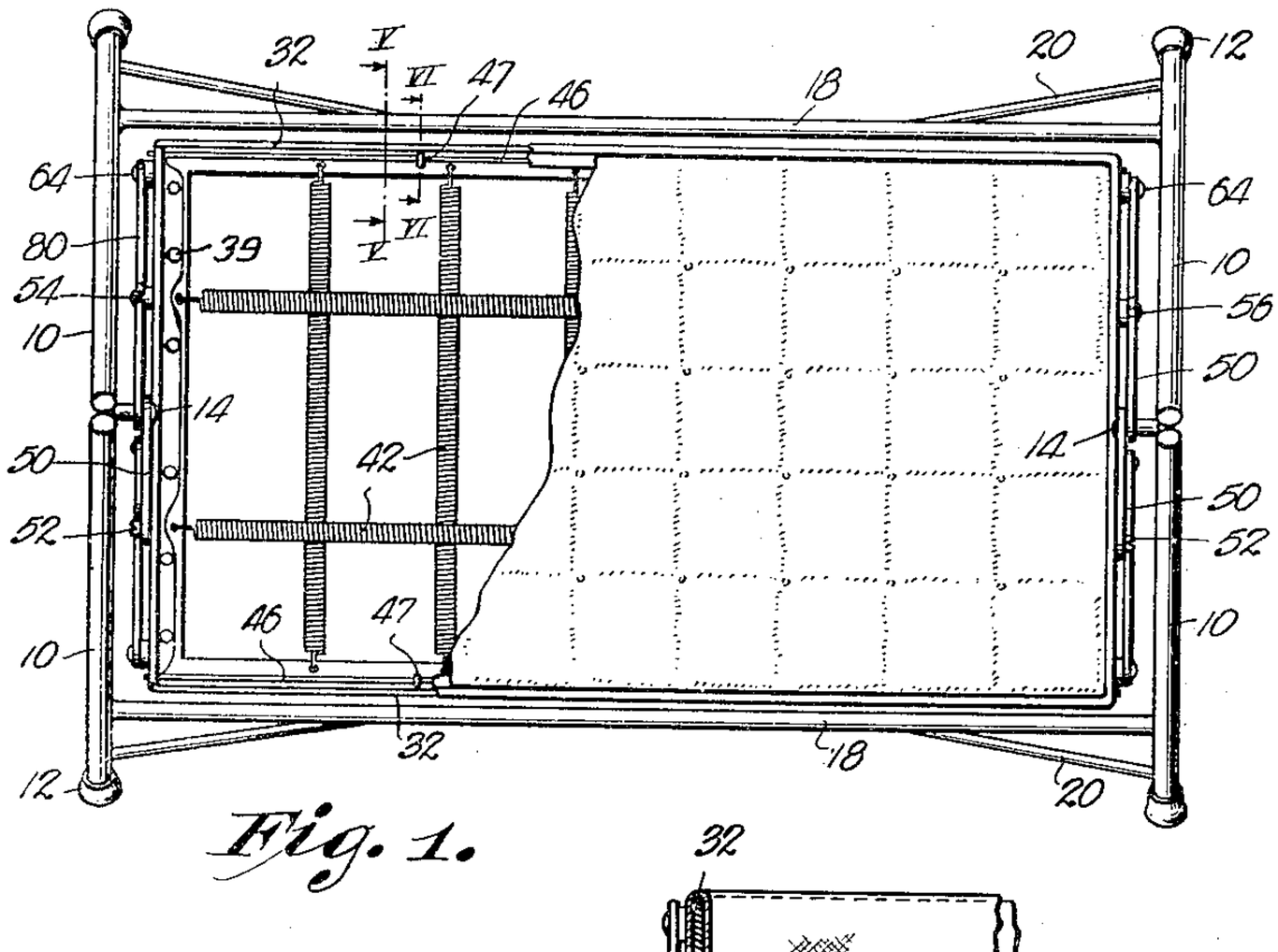

Fig. 1.

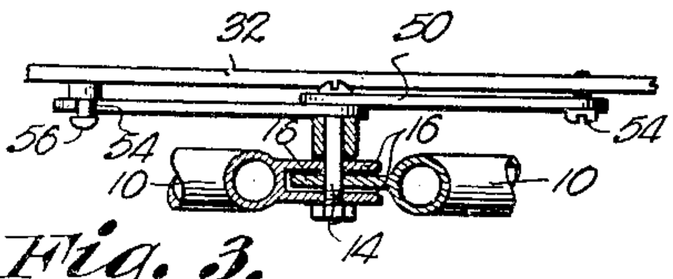

Fig. 3.

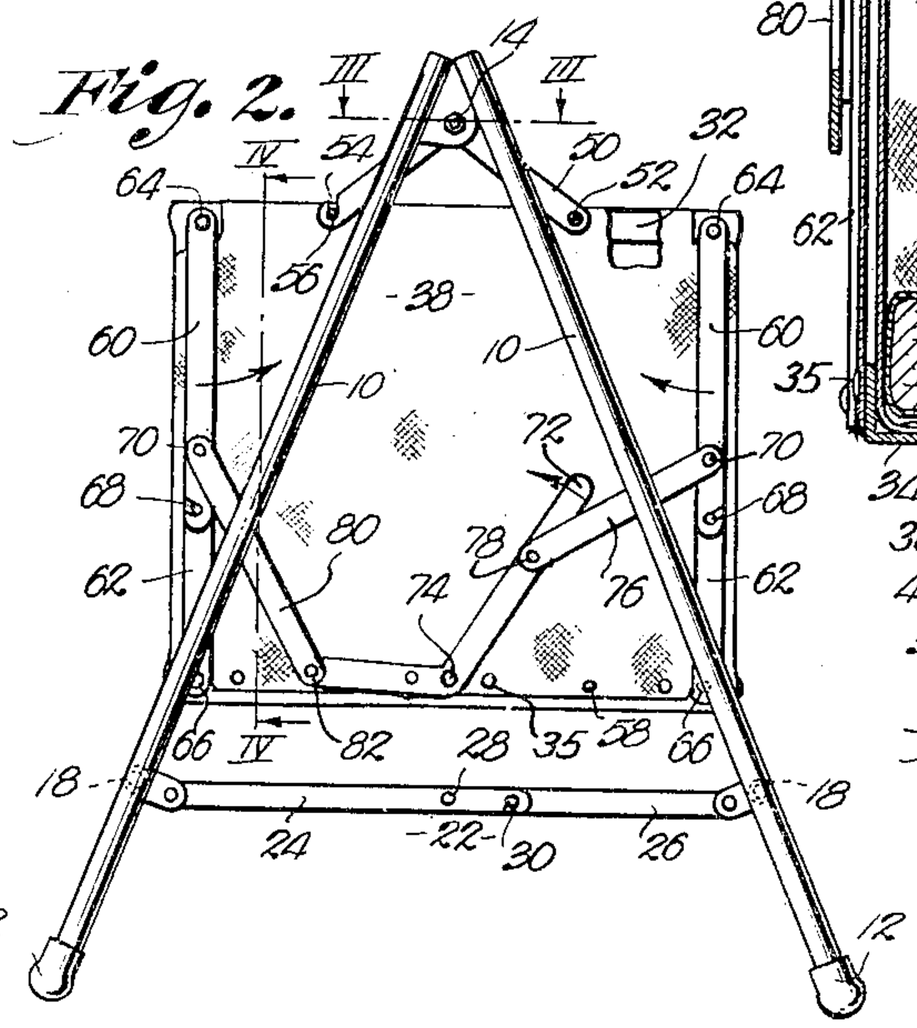

Fig. 2.

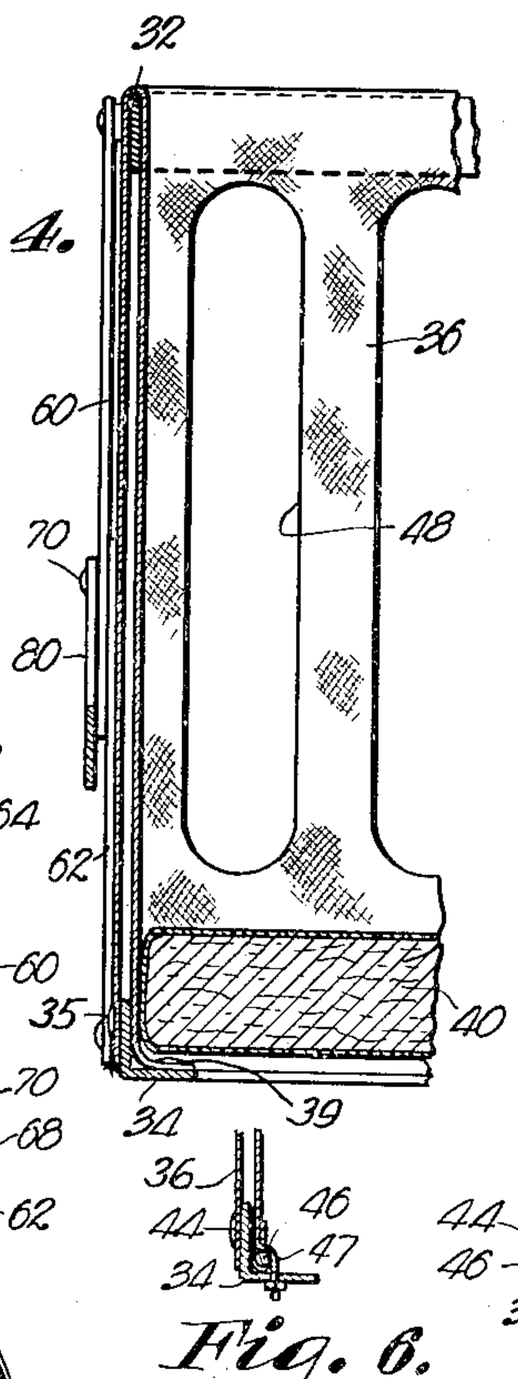

Fig. 4.

Fig. 6.

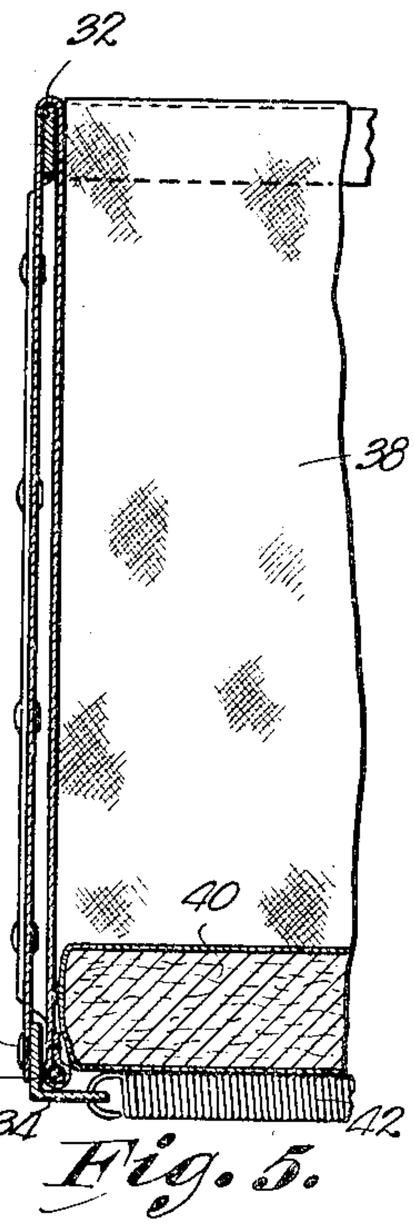

Fig. 5.

INVENTOR.
Alexander F. Amelung
BY
Jacob Hovey
ATTORNEY.

Oct. 25, 1949. A. F. AMELUNG 2,486,093

FOLDING CRIB

Filed Sept. 24, 1945

2 Sheets-Sheet 2

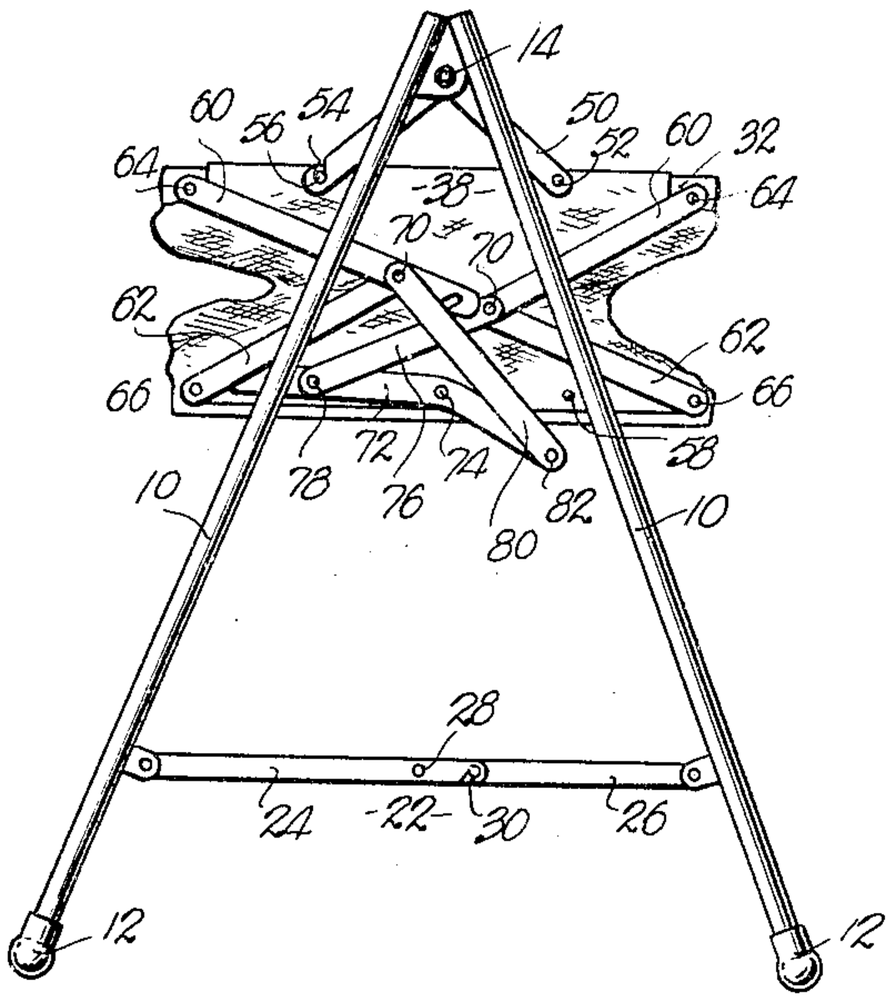

Fig. 7.

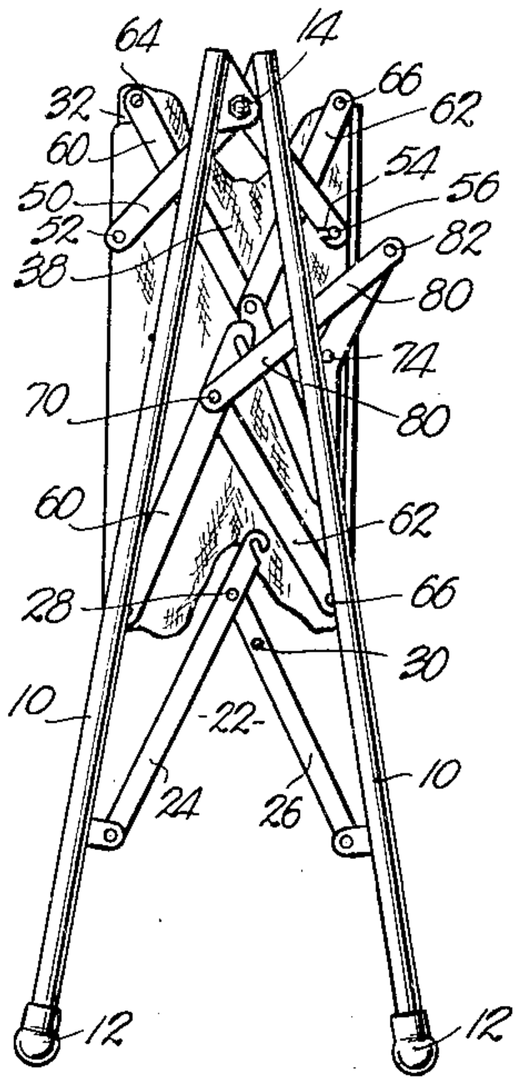

Fig. 8.

INVENTOR.
Alexander F. Amelung
BY
ATTORNEY.

Patented Oct. 25, 1949

2,486,093

UNITED STATES PATENT OFFICE

2,486,093

FOLDING CRIB

Alexander F. Amelung, Kansas City, Mo.

Application September 24, 1945, Serial No. 618,110

4 Claims. (Cl. 5—99)

1

The present invention pertains to foldable articles of furniture and particularly collapsible cribs for infants, the nature whereof permits manipulating the component parts of the assembly to and from an operative position with a minimum amount of work.

One of the important aims of my invention is to provide a folding crib of the character employed in cradling infants, which crib may be collapsed to a condensed condition for transportation and storage.

This invention has for a further object to provide a folding article of furniture of the aforementioned type, which comprises a series of specially formed and disposed sections, none of which are separable from the assembly when the article is shifted from the operative to the inoperative position, but which cooperate to maintain the elements of the assembly in a place where they may be again disposed to present an extended crib that is swingably carried on supporting standards and which includes a rigid frame-work capable of safely holding an occupant in a comfortable position.

Other aims of the invention include a large number of specific details of construction, the character whereof will appear during the course of the following specification, referring to the accompanying drawing wherein:

Fig. 1 is a top plan view of a folding crib made pursuant to the present invention.

Fig. 2 is an end elevational view of the crib illustrating the same in an extended and operative condition.

Fig. 3 is an enlarged fragmentary detailed sectional view taken on line III—III of Fig. 2 looking in the direction of the arrows.

Fig. 4 is a fragmentary sectional view taken on line IV—IV of Fig. 2.

Fig. 5 is a fragmentary sectional view on an enlarged scale, taken on line V—V of Fig. 1.

Fig. 6 is a similar fragmentary sectional view taken on line VI—VI of Fig. 1.

Fig. 7 is an end elevational view showing the crib in a partially collapsed condition; and

Fig. 8 is an end elevational view showing the same in a fully collapsed condition.

It is highly desirable to carry cribs for infants from place-to-place to the end that sleeping accommodations may be available. The crib chosen for illustration is capable of being collapsed to a compact bundle when not in the extended condition illustrated in the drawing, and since such collapsing may occur with convenience and speed, the arrangement of parts

2

becomes unique and desirable particularly where the bundle formed is of small dimensions and easy to transport.

Not only is the bed portion of the crib capable of being folded, but the standard or frame-work upon which the bed per se is mounted may be collapsed to be a part of the bundle as the bed is attached thereto.

An understanding of the structure illustrated will readily teach the manner of producing the folding crib and in the drawing, reference numeral **10** designates a standard, a number of which are employed and arranged in pairs at the end of the crib assembly. These standards **10** should be tubular in form to insure rigidity and lightness, and the lower ends thereof are provided with feet of resilient material **12**. In practice, crutch tips will be found advantageous in supplying the feet, but such may be molded if desired.

The upper ends of standards **10** are articulated as clearly illustrated in Fig. 3, and held in such condition by a bolt **14** passing through perforated lugs **16** disposed in overlapped relation to allow swinging of standards **10** to juxtaposed, parallel positions.

Standards **10** are joined by braces **18** extending longitudinally of the crib and below the hereinafter described bed portion, and these braces **18** are supplemented by additional securing elements **20**, as shown in Fig. 1. Thus, when standards **10** are extended (see Fig. 2), they will remain upright and spread apart because of braces **22** comprising sections **24** and **26**. These sections are pivotally secured at their outer ends to their respective standards **10**, and secured together at pivotal point **28** to permit movement thereof in the direction of the arrows shown in Fig. 2. A locking pin and slot structure **30** effects a jackknife joint, and therefore, sections **24** and **26** can move only in the direction of the aforesaid arrows when the lower portions of standards **10** are to be moved together.

The bed portion of the crib comprises an upper continuous, polygonal frame **32** and an L-shaped continuous, polygonal frame **34**, each of which serves to support the fabric side walls **36** and end walls **38** in a place to confine the occupant of the bed. A pad **40** rests upon a number of springs **42**, that are secured to their ends to frame **34**. The fabric from which walls **36** are produced is fastened to frame **34** at the lowermost marginal edges by snap fasteners **44** of the kind having cooperating elements on the frame **34** and the fabric respectively. This fabric is then extended upwardly to loop over frame **32** and thence down-

wardly where the opposite marginal edges thereof receive a rod **46**. There is a rod **46** for each wall **36** respectively, that are held in place by eye bolts **47** secured to frame **34** along the innermost faces of the longitudinal stretches thereof.

The fabric of end walls **38** is likewise secured to the outermost face of frame **34** by snap fasteners **35**, looped over frame **32** and extended downwardly for connection with frame **34** by snap fasteners **39**.

Each thickness of side walls **36** is provided with vertical or transverse openings **48** to insure ventilation and such slotting may be extended around to end walls **38** if desired. In view of the positioning of the linkage about to be described, however, it is preferable to make end walls **38** solid to prevent the hands or feet of the occupant from coming into contact with the links or even with standards **10** when the bed is swung about bolt **14** when the assembly is in the operative condition with hangers **50** engaging bolt **14** to constitute the support for the bed. There is a hanger **50** at each end of the bed and at the top of each pair of standards **10**. Each hanger comprises a pair of strips diverging from the axis of bolt **14**. The lower or remote end of one of these strips is pivoted to upper frame **32** as at **52**, while the lower end of the other strip is notched as at **54** to engage a pin **56**. It is this notch **54** that receives pin **58** when the parts of the bed are collapsed.

The upper and lower frames **32** and **34** are connected by an element at each corner, each of which elements comprises a section **60** and a section **62**. When these elements **60** and **62** are moved to the position shown in Fig. 2, side and end walls **36** and **38** respectively will be in a "stretched" condition between frames **32** and **34**. Section **60** is uppermost and has its top end pivotally secured as at **64** to upper frame **32**. The lower end of lower element **62** is pivotally secured to frame **34** as at **66**. A notch and pin structure **68** at the overlapped inner ends of sections **60** and **62** cooperate with pin **70** in allowing these said sections to move inwardly in the direction of the arrows shown in Fig. 2. Such movement permits upper and lower frame **32** and **34** respectively, to approach each other in parallelism upon manually manipulating lever **72** pivotally secured to lower frame **34** as at **74**, and pivoted to a link **76** at **78**. This said link **76** is pivoted to sections **60** and **62** at point **70**. Another link **80** cooperates with lever **72** in drawing sections **60** and **62** inwardly at their zones of connection. This said link **80** is pivotally joined as at **82** to lever **72** and is attached to one pair of sections **60** and **62** at one end of the bed by the rivet or bolt which forms pivotal point **70**. Both ends of the bed are identical in character and when lever **72** at the ends of the bed is moved in the direction of the arrow shown in Fig. 2, sections **60** and **62** will move inwardly and draw upper and lower frames **32** and **34** toward each other as shown in Fig. 7. Strip of hanger **50** that is notched is disengaged from pin **56** and swung into engagement with pin **58** when the upper and lower frames are moved together. This action will preclude accidental opening of the bed by frames **32** and **34** moving from each other, and the entire collapsed bed assembly will be hung upon the frame comprising standards **10** as these standards are moved toward each other when sections **24** and **26** are "broken" about pivotal point **28** all as illustrated in Fig. 8.

The plane of upper and lower frames **32** and **34** will be in parallelism, the standards **10** and braces **18** will be within extended planes of frames **32** and **34**, and a flat, compact body will result.

It is realized that folding cribs having physical characteristics different from those illustrated and described might be made without departing from the spirit of the invention or scope of the appended claims.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A folding crib comprising a support; a bed swingably carried by the support, said support including a pair of standards at each end of the bed, each pair of standards being pivotally interconnected at the uppermost ends thereof and having a sectional brace intermediate the ends of the standards, said sections having releasable interlocking means for holding the opposite ends of the standards in spaced relation; structure pivotally secured to said connection between the standards for joining the bed to the standards, said bed including a normally upper and a lower polygonal frame member and a plurality of elements interconnecting the frames, said structure comprising a pair of links each having one end thereof pivotally secured to said upper frame, said elements each comprising a pair of sections having releasable interlocking means for holding the frames in spaced relation when the sections of each element are interlocked; a manually manipulable lever swingably mounted on said lower frame; and a link pivotally interconnecting one section of each element respectively and said lever for moving said elements to and from an interlocked position as the lever is swung, said frames being movable toward each other by said elements when the latter are shifted from the interlocked position.

2. A folding crib comprising a support; a bed swingably carried by the support, said support including a pair of standards at each end of the bed, each pair of standards being pivotally interconnected at the uppermost ends thereof and having a sectional brace intermediate the ends of the standards, said sections having releasable interlocking means for holding the opposite ends of the standards in spaced relation; and structure pivotally secured to said connection between the standards for joining the bed to the standards, said bed including a normally upper and a lower polygonal frame member and a plurality of elements interconnecting the frames, said structure comprising a pair of links each having one end thereof pivotally secured to said upper frame, said elements each comprising a pair of sections having releasable interlocking means for holding the frames in spaced relation when the sections of each element are interlocked, one of said links being releasably secured to the upper frame whereby to permit swinging of the frames into parallelism with a plane passing through the pivotal connection and midway between the lowermost ends of the standards when the frames are moved together.

3. A folding crib comprising a support; a bed swingably carried by the support, said support including a pair of standards at each end of the bed, each pair of standards being pivotally interconnected at the uppermost ends thereof and having a sectional brace intermediate the ends of the standards, said sections having releasable interlocking means for holding the opposite ends of the standards in spaced relation; and structure pivotally secured to said connection between

the standards for joining the bed to the standards, said bed including a normally upper and a lower polygonal frame member and a plurality of elements interconnecting the frames, said structure comprising a pair of links each having one end thereof pivotally secured to said upper frame, said elements each comprising a pair of sections having releasable interlocking means for holding the frames in spaced relation when the sections of each element are interlocked, one of said links being releasably secured to the upper frame whereby to permit swinging of the frames into parallelism with a plane passing through the pivotal connection and midway between the lowermost ends of the standards when the frames are moved together, said lower frame having means to receive said one link to hold the frames together when the one link is released from the upper frame.

4. A folding crib comprising a support; a bed swingably carried by the support, said support including a pair of standards at each end of the bed, each pair of standards being pivotally interconnected at the uppermost ends thereof and having a sectional brace intermediate the ends of the standards, said sections having releasable interlocking means for holding the opposite ends of the standards in spaced relation; and structure pivotally secured to said connection between the standards for joining the bed to the standards, said bed including a normally upper and a lower polygonal frame member and a plurality of elements interconnecting the frames, said structure comprising a pair of links each having one end thereof pivotally secured to said upper

frame, said elements each comprising a pair of sections having releasable interlocking means for holding the frames in spaced relation when the sections of each element are interlocked, one of said links being releasably secured to the upper frame whereby to permit swinging of the frames into parallelism with a plane passing through the pivotal connection and midway between the lowermost ends of the standards when the frames are moved together, said lower frame having means to receive said one link to hold the frames together when the one link is released from the upper frame, said lowermost ends of the standards being moveable toward said plane upon release of said sections joining the standards.

ALEXANDER F. AMELUNG.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,071,396	Clement	Aug. 26, 1913
1,204,791	Kyle	Nov. 14, 1916
1,220,015	Sisbower et al.	Mar. 20, 1917
1,227,710	Walsh	May 29, 1917
1,230,736	Lowy et al.	June 19, 1917
1,266,927	Eberle	May 21, 1918
1,339,355	Kohlman	May 4, 1920
1,724,852	Scott	Aug. 13, 1929
1,779,742	Lives	Oct. 28, 1930
2,277,406	Mahr	Mar. 24, 1942