Jan. 18, 1949. W. M. McCLINTOCK ET AL 2,459,445

FOLDING INFANT'S CRIB

Filed Sept. 11, 1946 2 Sheets-Sheet 1

FIG. 1.

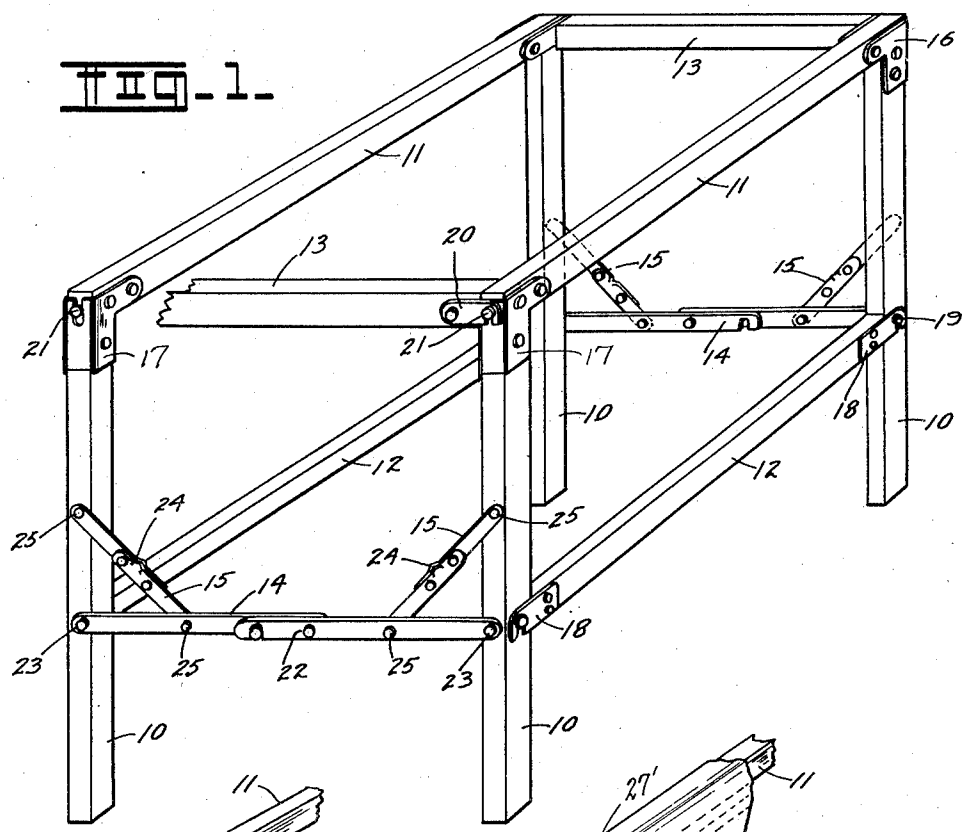
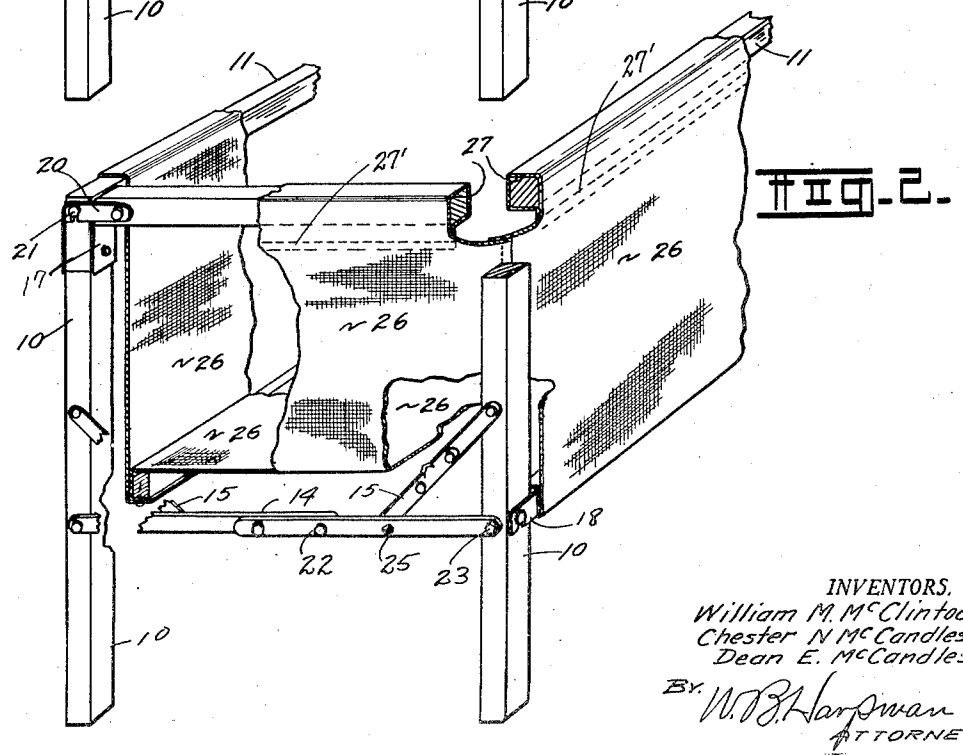


FIG. 2.



INVENTORS.
William M. McClintock.
Chester N. McCandless.
Dean E. McCandless.
BY. W. B. Harpman
ATTORNEY.

Jan. 18, 1949. W. M. McCLINTOCK ET AL 2,459,445

FOLDING INFANT'S CRIB

Filed Sept. 11, 1946 2 Sheets-Sheet 2

FIG. 3.

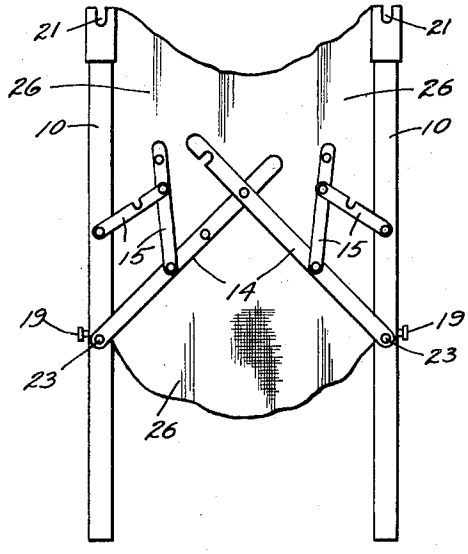


FIG. 4.

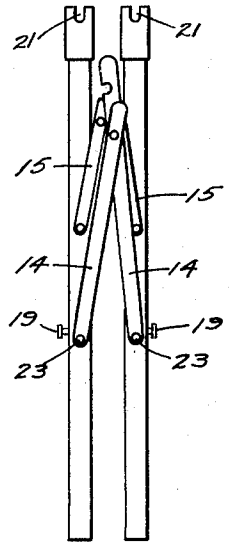


FIG. 5.

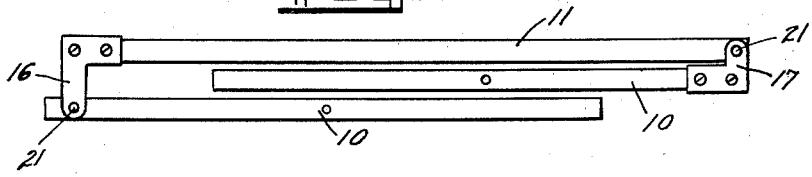
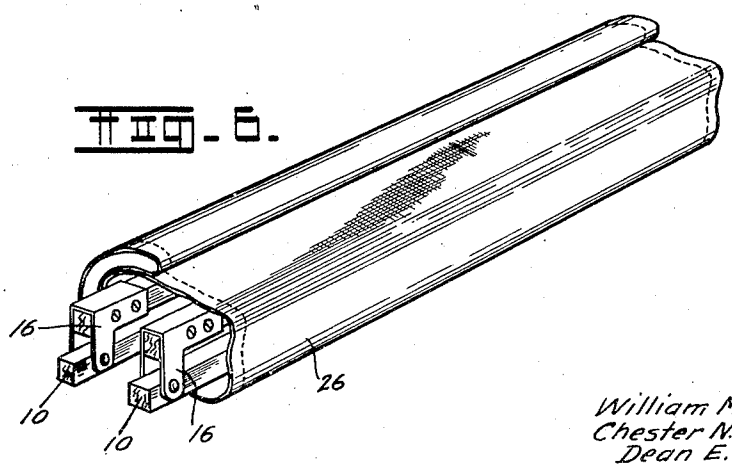


FIG. 6.



INVENTORS.
William M. McClintock.
Chester N. McCandless.
Dean E. McCandless.
BY W. B. Hardman
ATTORNEY.

Patented Jan. 18, 1949 2,459,445

UNITED STATES PATENT OFFICE

2,459,445

FOLDING INFANT'S CRIB

William M. McClintock, New Kensington, Pa., and Chester N. McCandless and Dean E. McCandless, Youngstown, Ohio

Application September 11, 1946, Serial No. 696,078

6 Claims. (Cl. 5—99)

1

This invention relates to folding infants' cribs and has for its object the provision of an economical structure which can be folded into a compact unit for storage or transportation, and which can be extended into a stable structure serving as a comfortable infants' crib.

In the following description of an embodiment of the invention, reference is had to the accompanying drawings, in which:

Figure 1 is a perspective view showing the supporting frame of the crib in extended position.

Figure 2 is a perspective view of one end of the crib, showing the attachment of flexible fabric thereto.

Figure 3 is an end elevational view showing the parts in partially folded position.

Figure 4 is an end elevational view showing the position of the parts after the first folding operation.

Figure 5 is a side elevational view showing the supporting frame completely folded.

Figure 6 is a perspective view showing the folded crib ready for transportation or storage.

The supporting frame comprises four legs 10, a pair of upper side rails 11, a pair of lower side rails 12, a pair of upper end rails 13, a pair of lower end rails 14, and four braces 15.

Each of the said side rails 11 rests at its ends on two of the legs 10, one end of each side rail 11 being secured to its supporting leg by means of an angle member 16 fixed to the rail and pivoted to the leg at a point below its upper end. The other end of each side rail 11 is secured to its supporting leg by means of an angle member 17 fixed to the leg and pivoted to the rail at a point short of its end. The angle members 16 and 17 are identical and need merely be properly positioned to place the single pivot in an aperture on the leg or on the rail.

Each of the lower side rails 12 extends between and has its ends bearing upon two of the legs 10. Hooks 18 are fixed to the rails 12 and engage studs 19 on legs 10. Each of the upper end rails 13 is connected to and has its ends bearing upon the upper side rails 11. Hooks 20 fixed to the rails 13 engage studs 21 on the ends of the upper side rails 11. Each lower end rail 14 is formed of two parts connected to provide a knee joint at 22 and are pivotally attached to the legs 10 at 23. Each brace 15 is also formed of two parts connected to provide a knee joint at 24 and are pivotally attached to the legs 10 at 25.

By referring to Figure 2 of the drawings it will be seen that flexible material such as canvas 26 is secured to the frame as by means of deep hems

2

27 stitched as at 27' to receive rails 11 and 13. The flexible material may be cut from a single piece of material, or one piece may be used on the sides and bottom of the frame and separate pieces secured to the ends of the frame as shown in the drawings. Suitable openings can be cut in the flexible material to provide visibility.

In collapsing the crib for transportation or storage, the end rails 13 are disengaged from the studs 21 and removed from the hems 27 and placed upon the bottom web of the canvas. The rails 14 and braces 15 are then folded at their knee joints 22 and 24 as shown in Figure 3 until fully collapsed as shown in Figure 4. Lower side rails 12 are then disengaged from studs 19 and legs 10 are turned about the pivotal connections of the angle members 16 and 17 until the frame is fully collapsed as shown in Figure 5. The loose canvas, which hangs fully from the structure as shown in Figure 4, is then wrapped about the collapsed frame to provide the compact package shown in Figure 6.

It will be seen that by the novel combination of parts and manner of their association, we have accomplished the objects of the invention in providing a sturdy and serviceable infant's crib which can be folded into a compact unit for transportation and storage. Furthermore, the structure is characterized by an economy of parts and materials and identity of parts whereby the cost of its manufacture is held at a minimum.

The specific example chosen for illustration is not to be considered as limiting. The substitution of equivalent parts is contemplated within the scope of our invention, which is limited only as defined in the appended claims.

We claim:

1. A folding structure comprising four straight legs, a pair of upper side rails, a pair of lower side rails, a pair of upper end rails, and a pair of lower end rails, each of said upper side rails being supported at its ends on two of said legs, each upper side rail being secured at one end to its supporting leg by a pivotal connection, the center of which is offset from said leg and at the other end to its supporting leg by a pivotal connection the center of which is offset from said rail, said upper end rails being detachably secured at each end to the ends of said upper side rails, said lower side rails being detachably secured at each end to one of said legs, and each of said lower end rails being pivotally secured at each end to one of said legs and comprised of two members having a central knee joint.

2. A folding crib comprising four upright legs,

a pair of upper side rails, a pair of lower side rails, a pair of upper end rails, a pair of lower end rails, each of said upper side rails being supported at its ends on two of said legs, each upper side rail being secured at one end to its supporting leg by a pivotal connection, the center of which is offset from said leg and at the other end to its supporting leg by a pivotal connection, the center of which is offset from said rail, said upper end rails being detachably secured at their ends to the ends of said upper side rails, each of said lower side rails being detachably secured at each end to one of said legs, each of said lower end rails being pivotally secured at each end to one of said legs and comprised of two members flexibly joined, and flexible material supported on said upper side rails and said upper end rails and passing beneath said lower side rails.

3. A folding crib comprising four upright legs, a pair of upper side rails, a pair of lower side rails, a pair of upper end rails, a pair of lower end rails, each of said upper end rails being supported at its ends on two of said legs, each upper side rail being secured at one end to its supporting leg by a pivotal connection, the center of which is offset from said leg and at the other end to its supporting leg by a pivotal connection the center of which is offset from said rail, said upper end rails extending between and detachably secured to the ends of said upper side rails, each of said lower side rails extending between and detachably secured to the pair of legs supporting one of said upper side rails, each of said lower end rails being pivotally secured at each end to one of said legs and comprised of two members having a central knee joint, a flexible brace connecting each said member to one of said legs, and flexible material supported on said upper side rails and detachably secured to said upper end rails and passing beneath said lower side rails.

4. A folding crib comprising four upright legs, a pair of upper side rails, a pair of lower side rails, a pair of upper end rails, a pair of lower end rails, each of said upper side rails being supported at its ends on two of said legs, one end of each upper side rail having fixed thereto a plate having an extension pivoted to its supporting leg, the other end of each upper side rail having pivoted thereto a plate having an extension fixed to its supporting leg, said upper end rails extending between and detachably secured to the ends of said upper side rails, each of said lower side rails extending between and detachably secured to the pair of legs supporting one of said upper side rails, each of said lower end rails being pivotally secured at its ends to opposed side rail supporting legs and comprised of two members having a central knee joint, a flexible brace connecting each of said members to one of said legs, and flexible material supported on said upper side rails and said upper end rails and passing beneath said lower side rails.

5. A folding crib comprising a collapsible frame and a flexible body, said frame comprising a pair of upper side rails, each end of each upper side rail being supported on a separate leg, each upper side rail being connected to one of its supporting legs by a pivotal connection offset from the leg and to its other supporting leg by a pivotal connection offset from the rail, a stud projecting from each end of the upper side rails, a pair of upper end rails extending between the upper side rails at the ends thereof and having a detachable connection with said studs, a lower side rail parallel with each upper side rail extending between and detachably connected to the legs supporting said upper side rail, and a pair of lower end rails each pivotally connected at its ends to opposed side rail supporting legs and having a central knee joint, and said body being formed of flexible material supported on said upper side rails and said upper end rails and passing beneath said lower side rails.

6. A folding crib comprising a collapsible frame and a flexible body, said frame comprising a pair of upper side rails, each end of each upper side rail being supporting on a separate leg, one end of each upper side rail having fixed thereto an angular plate pivoted to its supporting leg, the other end of each upper side rail having pivoted thereto an angular plate fixed to its supporting leg, a stud projecting from each end of the upper side rails, a pair of upper end rails extending between the upper side rails at the ends thereof and having a detachable connection with said studs, a lower side rail parallel with each upper side rail extending between and detachably connected to the legs supporting said upper side rail, and a pair of lower end rails each pivotally connected at its ends to opposed side rail supporting legs and having a central knee joint, and said body being formed of flexible material supported on said upper side rails and said upper end rails and passing beneath said lower side rails.

WILLIAM M. McCLINTOCK.
CHESTER N. McCANDLESS.
DEAN E. McCANDLESS.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
609,491	Ashwell	Aug. 23, 1898
1,724,852	Scott	Aug. 13, 1929
1,732,008	Frantz	Oct. 15, 1929

FOREIGN PATENTS

Number	Country	Date
576,055	France	May 5, 1924