July 28, 1953 H. ABRAMS 2,646,576

COLLAPSIBLE CRIB CONSTRUCTION

Filed May 9, 1951

Fig. 1

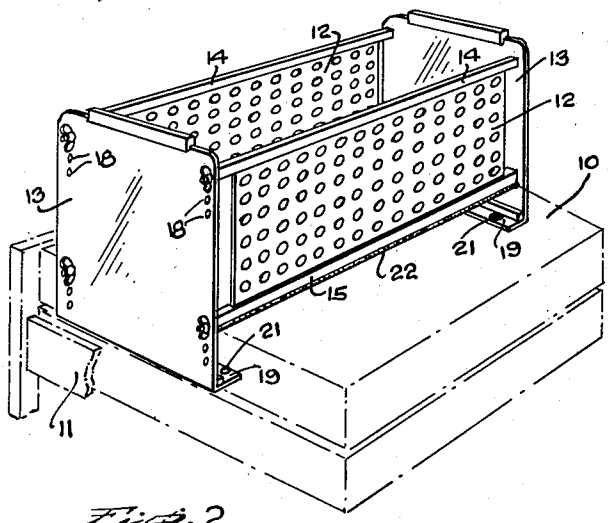

Fig. 6

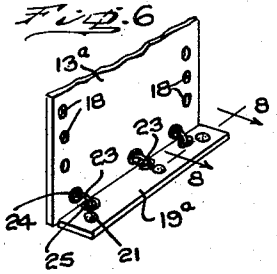

Fig. 4

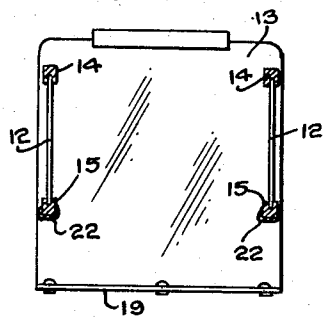

Fig. 2

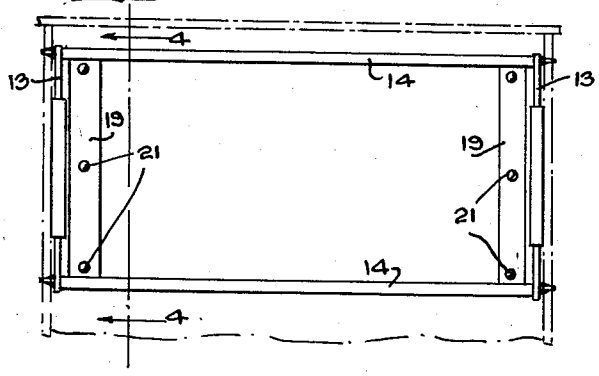

Fig. 8

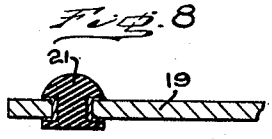

Fig. 5

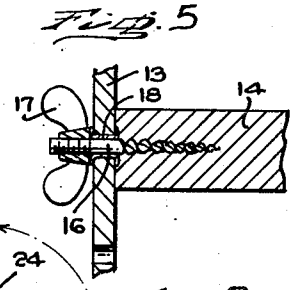

Fig. 3

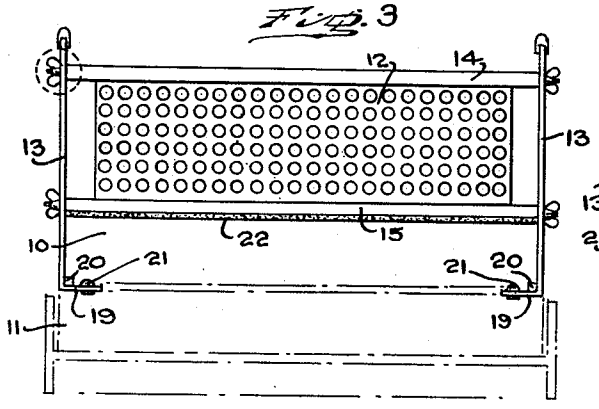

Fig. 7

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COLLAPSIBLE CRIB CONSTRUCTION

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6 Claims. (Cl. 5—95)

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This invention relates generally to infants' cribs and more particularly to an improved knock-down construction of crib which is adapted to be readily assembled and detachably secured to the mattress of an adult's bed whereby to provide upon the bed a safe enclosure for the occupant of the crib.

Among the principal objects of the present invention is to provide an extremely simple and inexpensive crib-forming unit which is formed of a minimum number of readily separable parts adapted to be quickly-detachably secured together in assembly with the mattress of a conventional bed to form a sturdy crib-type bed for an infant.

A further and important object of the invention is to provide a collapsible crib the component parts of which are adapted to be assembled in crib-forming relation upon the mattress of a conventional bed, the several parts of the crib-forming assembly being of such relative design and construction that when assembled upon the mattress the latter constitutes a relatively immovable part of the crib.

Still another object of the invention is to provide a knock-down construction of crib which is adapted to be set up to extend transversely across the full width of any portion of the mattress of a conventional bed, the crib construction being such that the mattress is the only part of the bed which is essential toward providing a strong and rigid four-sided crib-like enclosure.

A still further object of the invention is to provide a crib-forming unit the component parts of which are adapted to be stacked into compact form to facilitate convenient transportation and storage thereof, said parts being further adapted for assembly upon a mattress into a crib-forming relation without requiring the use of any special setting-up tools or devices.

Other objects and advantages of the present invention will appear more fully hereinafter, it being understood that the invention consists in the combination, construction, location and relative arrangement of parts, all as will appear more fully hereinafter, as shown in the accompanying drawings and as finally pointed out in the appended claims.

In the accompanying drawings, which are illustrative of certain preferred embodiments of the invention, Figure 1 is a perspective view showing the crib-forming unit of the present invention set up upon the mattress of a conventional bed;

Figure 2 is a top plan view of the crib assembly shown in Figure 1;

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Figure 3 is a side elevational view thereof;

Figure 4 is a transverse sectional view of the crib-forming unit as taken along the line 4—4 of Figure 2;

Figure 5 is an enlarged sectional view of an upper corner of the crib-assembly, such as is embraced by the broken line circle of Figure 3;

Figure 6 is a perspective view showing the lower portion of a modified construction of the end wall member of the unit;

Figure 7 is a sectional view of the part shown in Figure 6; and

Figure 8 is a sectional view of a detail as taken along the line 8—8 of Figure 6.

Referring now more particularly to the drawings, it will be observed that the crib-forming unit of the present invention is adapted to be assembled upon the mattress 10 of a conventional bed 11, both the mattress and bed being shown in dotted line configuration. The term "conventional bed" is intended to include those which take either standard size, three-quarter size or twin bed size mattresses, the crib unit of the present invention being made up in sizes adapting it to be secured in position to extend transversely across the full width of any of these mattresses of standard sizes.

Inasmuch as the crib unit of the present invention is adapted for assembly upon the mattress itself, it is immaterial insofar as the present invention is concerned, as to whether or not the bed is provided with head or foot posts. As a matter of fact, the crib unit of the present invention may be readily assembled upon a mattress completely disassociated from its bed, as when such mattress is placed directly upon the floor to form a component part of the completely assembled crib.

The crib unit of the present invention essentially consists of a pair of similar side wall members 12—12 and a pair of similar end wall members 13—13. Each of the side wall members is provided with longitudinally extending upper and lower rails 14 and 15, the opposite ends of each of such rails being each provided with a freely projecting threaded stud 16 for threadedly receiving a wing nut 17.

The end wall members 13—13, which are in the form of simple panels of any desired material, are each provided along opposite sides thereof with a series of vertically spaced apertures 18 preferably arranged in two vertically spaced groups thereof these apertures being respectively adapted for projection therethrough of the threaded studs 16 of the side wall members 12—12. The spacing of the apertures 18 in each

group thereof is relatively such as to permit the side wall members 12—12 to be assembled in vertically adjusted position with respect to the end wall members 13—13.

It will be noted that these end wall members 13—13 are each of such height relatively to the side wall members as to provide them with portions which project downwardly below the lower rails 15—15 of the side wall members 12—12 when the latter are secured in assembled relation to the end wall members, the freely depending portions of the end wall members being of a depth sufficient to completely embrace the side edges of the mattress upon which the crib is to be assembled.

In the form of the end wall shown in Figures 1 to 4, inclusive, each of such members is provided along its lower edge with an inturned flange 19 which may be formed as an integral part of its associated end wall or as a separate element suitably secured thereto with the joint therebetween reinforced, as by a cleat 20. The flange 19 extends inwardly of its associated end panel to an extent sufficient to provide a substantial bearing against the bottom surface of the mattress 10. It will be apparent that when the end wall members 13—13 are assembled relatively to the mattress with their inwardly extending flanges 19—19 disposed beneath the mattress, as shown in Figure 1, and with said side wall members secured therebetween as shown, the mattress 10 is securely clamped between the inturned flanges 19—19 of the end wall members and the lower rails 15—15 of the side wall members. By proper registration of the studs 16 of the side wall members with selected apertures 18 of the end wall members, the side wall members may be locked by means of the wing nuts 17 threaded upon the studs 16, in vertically adjusted position to effect the desired clamping of the crib to the mattress 10.

In order to prevent any possibility of the crib-forming unit from shifting lengthwise of the mattress when it is assembled thereon as just described, it is desirable to provide the inturned flanges 19—19 of the end panels with inset knobs 21 of rubber or the like, which frictionally engage the under surface of the mattress and so firmly hold the crib in fixed assembly with respect to the mattress. Also, where a sheet or the like may be employed to cover the mattress within the confined area of the crib, it is desirable, in order to prevent creeping of the sheet relatively to the crib, to provide the bottom edges of the lower rails 15 with a stripping 22 of rubber or the like.

Figures 6 and 7 show a modified construction of an end rail member 13a which may be employed in lieu of that hereinbefore described. In this modified construction, the inwardly extending flange 19a is hingedly secured to the bottom edge of its associated end wall member by a plurality of ring elements 23 each of which extends through a pair of apertures 24 and 25, respectively formed in the adjoining edges of the members 13a and 19a. Preferably, these apertures 24—25 are each reinforced by a grommet 26, as are the apertures 18 through which extend the threaded studs 16 for receiving the wing nuts which secure the end panels to the side panels.

The modified construction of end panel, as shown in Figures 6 and 7, is desirable from the standpoint of reduced cost of manufacture and also because it renders somewhat more advantageous stacking of the component parts of the crib-forming unit.

What is claimed as new and useful is:

1. A collapsible crib unit adapted to be assembled upon and secured directly to a bed mattress comprising a plurality of separable panels securable together in assembled relation to provide a crib enclosure having parallel side walls extending transversely across the width of the mattress and parallel end walls engaging the opposite longitudinally extending side edges of the mattress, said side wall panels being adapted to rest upon the upper surface of the mattress while said end wall panels project downwardly to the plane of the bottom surface of said mattress, said end wall panels being provided at their lower ends with inwardly turned flanges adapted to underlie the mattress and to directly engage the underside thereof for clamping the mattress between said flanges and the lower edges of said side wall panels.

2. In a collapsible crib unit as defined in claim 1 wherein said inturned flanges are formed as rigid extensions of the end wall panels.

3. In a collapsible crib unit as defined in claim 1 wherein said side wall panels are adapted for detachable securement to said end wall panels in vertically adjusted position with respect to the latter.

4. A collapsible crib unit as defined in claim 1 having means for vertically adjusting said side wall panels relatively to said end wall panels to vary the effective distance between the lower edges of the latter and said inturned flanges for accommodation therebetween of mattresses of varying thickness.

5. In a collapsible crib unit as defined in claim 1 wherein said inturned flanges are respectively provided with means for preventing creeping of the crib lengthwise of the mattress.

6. In a collapsible crib unit as defined in claim 1 wherein the lower edges of the side wall panels are respectively provided with means for preventing creeping of a sheet or the like disposed between the mattress and said edges of the side wall panels.

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