Feb. 2, 1954 G. J. REGGIANI 2,667,647

COLLAPSIBLE AND PORTABLE CRIB ATTACHMENT

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Fig. 1

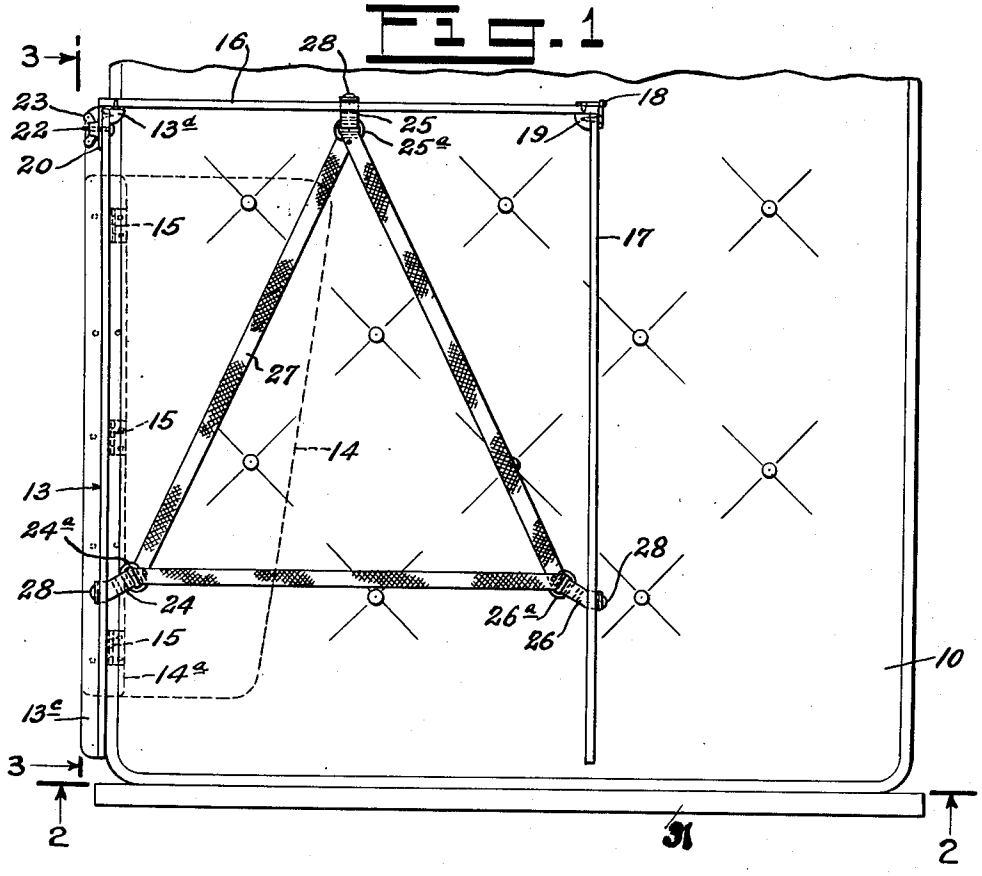
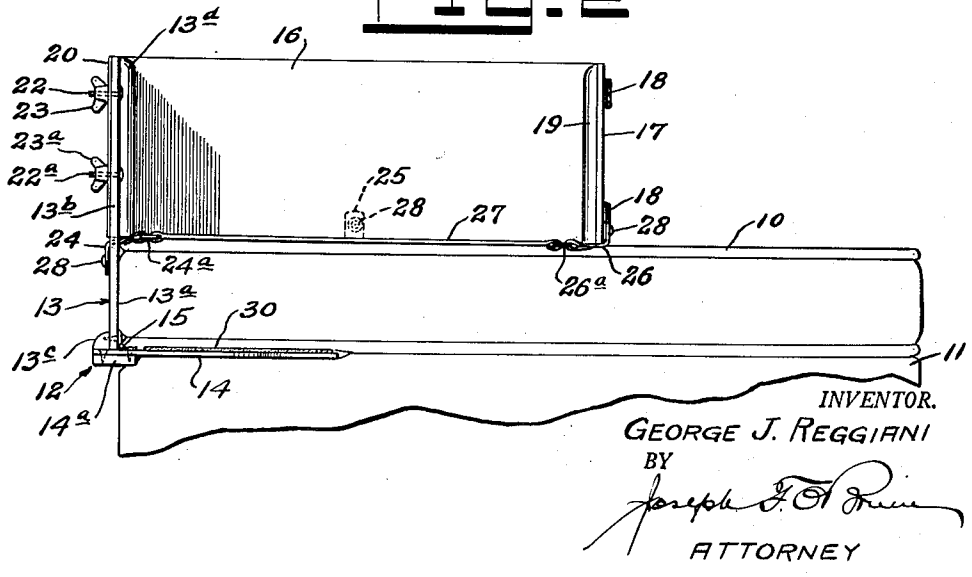


Fig. 2



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Fig. 3

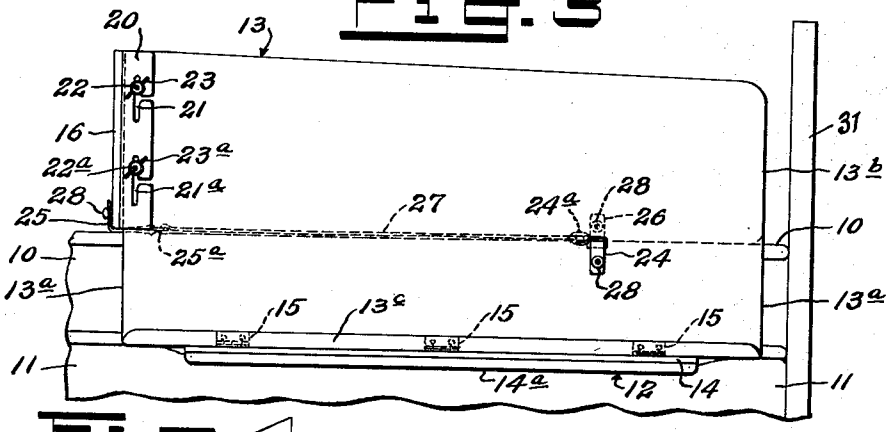


Fig. 4

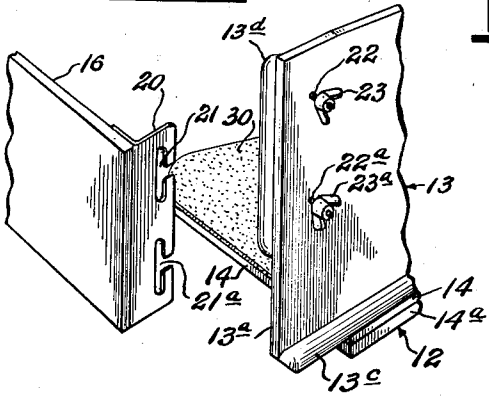


Fig. 5

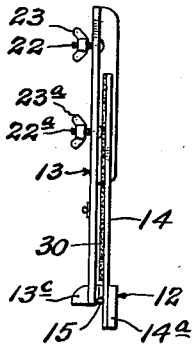


Fig. 6

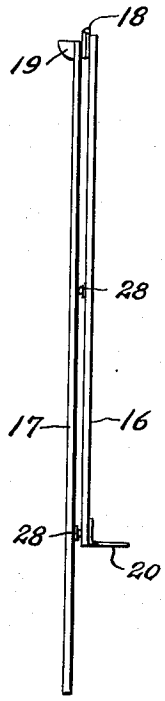
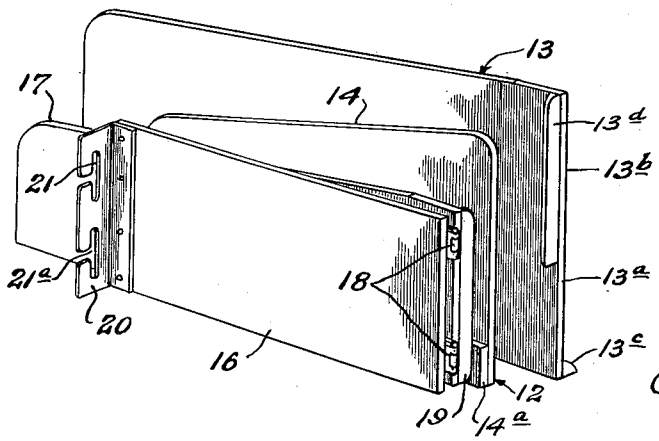


Fig. 7



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COLLAPSIBLE AND PORTABLE CRIB ATTACHMENT

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1 Claim. (Cl. 5—95)

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This invention relates to improvements in a collapsible and portable crib attachment adapted for temporary conversion of conventional beds, couches or the like into infants' cribs, and particularly relates to a collapsible and portable crib structure which is adapted for secure, ready, quick and facile mounting, demounting and placement over and in combination with a conventional mattress on a regular bed or couch to enclose a sectional area thereof for the purpose of preventing a sleeping infant from rolling out of the bed, couch or the like.

One of the objects of this invention is, in an attachment of the character specified, to simplify and greatly reduce the cost of crib constructions by reducing the number of parts to a minimum number of units by utilizing a pair of foldable units, one comprising an anchoring unit composed of an elongated anchoring rail member of rectangular configuration, preferably foldable inwardly and composed of an upright protective side rail element having at its lower edge a horizontally-extending mattress-underlying panel element normally extending at a right angle to said upright rail and provided with fastening means for connection thereto of an additional foldable mattress-overlying unit composed of rail members, said panel element being insertable between a mattress and spring and having sufficient length and width to provide a secure frictional engagement with the under surface of the mattress, and to anchor said angular anchoring member firmly in position at one side edge of the mattress, in combination with said foldable mattress-overlying unit composed of a plurality of protective rail members secured to one end of said anchoring member.

Another object of this invention is, in a device of the character specified, to provide between the anchoring rail member and the subsidiary rail members vertically-adjustable fastening means in order to enable the erection of my crib attachment upon mattresses of varying thicknesses.

Still another object of this invention is in a crib structure to utilize a mattress-overlying rail unit composed of outwardly-foldable members and having at one end a rectangularly-disposed fixed flange for connection to the anchoring unit, the members of said outwardly-foldable overlying rail unit being movable from a completely folded position to a position at a right angle to each other and said anchoring and overlying units being connected together by a reinforcing strap to securely fasten the anchoring unit and overlying-rail unit together.

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Still another object of this invention is to provide a crib construction having an anchoring rail unit which is useful as an edge rail of a bed for adults as well as the anchoring member for additional crib rails, and which may, if desired, be left in place until the bed, couch or the like is converted to a crib.

Another object of this invention is, in a device of the character specified, to provide an infant-protective crib composed of units or members which will be instantaneously erectable and removable and will be capable of being knocked down or collapsed and stored in a small space for transportation so as to be useful on vacations and like trips.

With these and other objects in view, the invention comprises the combination of members and arrangement of parts so combined as to coact and cooperate with each other in the performance of the functions and the accomplishment of the results herein contemplated, and comprises in one of its adaptations the species or preferred form illustrated in the accompanying drawings, in which:

Fig. 1 is a view in plan of a collapsible and portable crib attachment for beds embodying my invention shown in mounted engagement with a conventional bed mattress;

Fig. 2 is a section on the line 2—2 of Fig. 1 looking in the direction of the arrows;

Fig. 3 is a side elevation on the line 3—3 of Fig. 1 showing my anchoring rail with fastening means at one end for adjustable connection of the mattress-overlying rails;

Fig. 4 is a fragmentary perspective view showing the end of the mattress overlying top-rail disconnected from the end of the anchoring side rail;

Fig. 5 is a view from the head end of my side rail and anchoring panel removed and in folded position;

Fig. 6 is an end elevation of the mattress overlying top and side rails removed and in folded position; and

Fig. 7 is a perspective view of the two unit parts in folded transporting position.

Referring now to these drawings which illustrate a preferred embodiment of my invention, 10 indicates the mattress of a conventional bed and 11 indicates a spring on which the conventional mattress 10 is mounted.

In accordance with the preferred form of my invention illustrated, my crib attachment comprises two hingedly-connected units composed of a foldable angular anchoring member 12 comprising two foldable parts, one part being an up-

right edge rail member 13 having a mattress contacting side portion 13a, a raised upright portion 13b extending above the mattress a sufficient height and length to produce a protective or guarding side rail when the unit is mounted on and securely fastened to the mattress, and the other being a mattress-underlying anchoring panel member 14. To procure the mounting and secure fastening of the anchoring unit to the mattress, the underlying panel member 14 is securely fastened to the rail member 13 at its lower edge and, as shown, is hingedly-connected and angularly disposed relatively thereto. As more particularly shown in Figs. 1 and 2, said underlying panel 14 comprises an angular-extending and foldable element connected to said lower edge of the member 13 by a series of inwardly foldable hinges 15, said panel member 14 preferably being reinforced by outwardly-extending strip 14a at its outer rail-engaging edge and said edge rail 13 having its lower edge a quarter round reinforcing molding 13c fastened at the bottom portion of the rail 13 and having its angular faces fitting in the joint between the extension strip 14a and the lower portion 13a of the rail, said reinforcing molding serving to reinforce the angular joint and prevent excessive movement of the rail 13 and the panel 14 beyond a right angle.

As illustrated more particularly in Figs. 1 and 2, the member 14 comprises a panel preferably formed of wood and having an area sufficient to produce the necessary frictional engagement to provide an anchoring connection with the mattress, and, as shown, said panel is of a length substantially equal to the length of the edge rail and a width extending inwardly at its head portion for a distance equal to about half the length of the rail. Said panel is inserted beneath the mattress 10 and between said mattress 10 and the spring 11 and consequently provides a firm frictional engagement with the under surface of the mattress which will in itself securely hold the rail member 13 in upright position.

In the preferred embodiment of my invention shown, my mattress-overlying unit is composed of an overlying head rail 16 and a similarly overlying inner-side rail 17 hinged together by a hinge member 18 disposed on the outside surface of said head and inner side rails at the junction between them and adapted to permit a folding movement of said overlying rails in an outwardly extending arc, said head rail preferably being provided at the corner formed by the junction of the two members 16 and 17 with a vertically-disposed quarter-round molding 19 having its rectangular surfaces fitting within said corner to reinforce the hinge 18 and prevent excessive inward movement beyond a right angle of the inner side rail 17 in relation to said head rail 16.

These two overlying rail members 16 and 17 so connected together are superposed or mounted upon the upper surface of the mattress 10, and the head rail 16 is provided at the edge opposite said hinge 18 with a rectangularly-disposed connecting flange 20 adapted to contact the head end of the anchoring rail 13. As shown more particularly in Figs. 3 and 4, the flange 20 is provided with keying slots 21—21a having vertically-disposed adjusting portions, these keying slots being adapted to fit over bolts 22—22a on the head portion of the said rail 13 and to be securely and adjustably fastened to said head rail by thumb nuts 23—23a. It will be obvious that by such adjusting means, the overlying head and side rails

16 and 17 may be securely fastened to the anchoring rail 13 and that this construction will thus cause the top portion of the anchoring panel 14 and the head rail 16 to extend in parallelism one above and the other below the mattress, and because of the disposition of the slots 21, the head rail may be utilized with mattresses of varying thicknesses, and also may, if desired, be utilized to apply a moderate amount of pressure between the overlying head rail and the top surfaces of the mattress, thus resulting in a secure frictional engagement between the head rail and said upper surface of the anchoring member 14.

Suitable means is provided for retaining the rail 17 in a position parallel to the rail 13, and in the preferred embodiment of my invention, I provide each of the rail members intermediate its ends with short stub-straps 24—25 and 26 passed through slots or beneath the rails and provided with a suitable fastening element or elements such as snap fasteners 28. Each stub strap is provided with loop members 24a—25a and 26a, and I thread through such loop members 24a—25a and 26a a triangularly-disposed flexible strap 27 to connect the strap 27 to the stub straps. A strap 27 of the type hereinabove specified will not only prevent outward movement of the rail 17, but will reinforce and fasten the rails together and thus provide a unitary structure which will be securely held in place on the mattress and when so erected will guard and protect a sleeping infant from falling out of the bed on which the mattress is positioned, and, as shown, the crib structure is arranged to cause its open end to be positioned adjacent to the bottom or foot-board 31 of a bed so that said open end will be closed thereby.

It will be apparent also that in cases where a bed is not provided with a foot-board an anchoring member and crib structure of the type hereinabove specified may, if desired, be inverted with the anchoring member positioned at the opposite side of the bed so that the head-board of the bed will act as a closure for the open end of the crib structure and the construction will be in all respects similar to that hereinabove described except that its position on the bed will be changed to cause the open end or lower portion to be arranged adjacent to and closed by the head board.

It will be understood that the mattress-engaging surface of the panel member 14 may be roughened in any suitable manner to increase its frictional engagement with the bottom surface of the mattress, or may, if desired, be provided with a fabric coating 30.

Having described my invention, I claim:

A collapsible crib structure and mounting means therefor including a bed provided with a mattress, said crib structure comprising in erected position an elongated attachment unit of L-shaped cross-section and composed of an edge-rail element and a mattress-underlying panel element, said edge-rail element in erected position of the said unit having sufficient length and height to form the side of a crib and having its lower edge extending to a plane substantially coinciding in erected position with the plane of the lower surface of said mattress and provided at its said lower edge with a hinged joint connected to said panel element for inward folding movement, said hinged joint being fixed against outward movement beyond said L-shape, said mattress-underlying panel element comprising a

continuous flat sheet of rigid thin material extending in normally operative position beneath said mattress in a direct horizontal line from the bottom edge of said edge-rail element and being in said erected position of the said attachment unit slidably insertable beneath said mattress to provide a contacting surface beneath a portion of the mattress on which a child rests and stands, said panel element having a length slightly less than the length of said edge rail element and having a width of sufficient dimensions to provide a continuous and extensive frictional contact with said contacting surface, an additional rail element extending above the mattress and at a right angle to said edge rail element, and vertically-adjustable fastening means between said additional rail element and said edge rail element to enable the exertion of pressure of said additional element against the mattress and to lock the parts against relative movement,

and whereby said panel element when slidably inserted will firmly anchor said edge rail in position and any outward push exerted on said edge rail element by a child within said crib is neutralized.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
329,663	McMurray	Nov. 3, 1885
1,066,976	Atkinson	July 8, 1913
1,463,459	Comstock	July 31, 1923
2,371,844	Redman	Mar. 20, 1945
2,504,028	Lieff	Apr. 11, 1950

FOREIGN PATENTS

Number	Country	Date
4,097	Great Britain	1908
102,172	Great Britain	Nov. 23, 1916