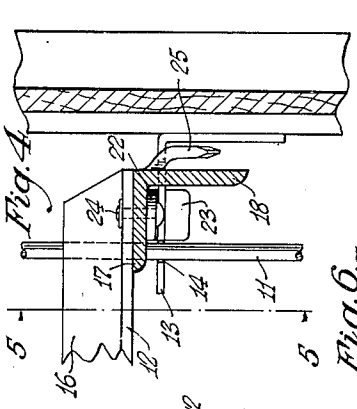
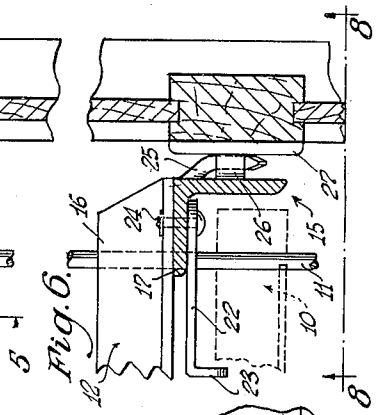
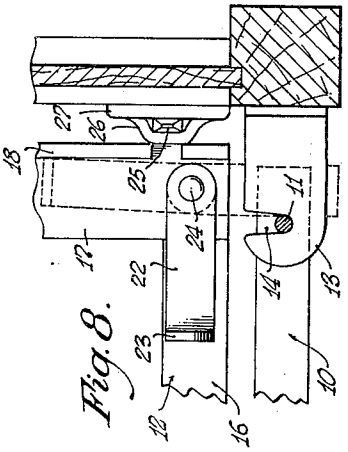
March 11, 1941. S. KROLL ET AL 2,234,261

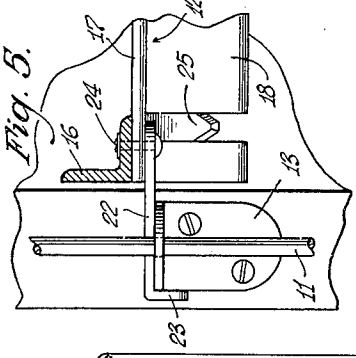
TWO-WAY SPRING FOR INFANTS' CRIBS

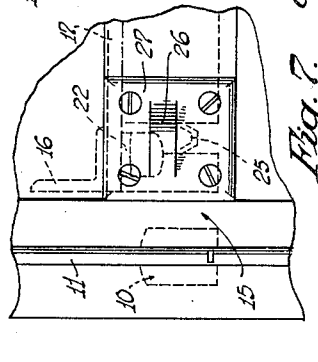
Filed June 19, 1939

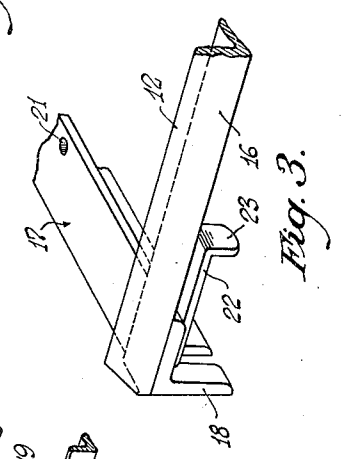


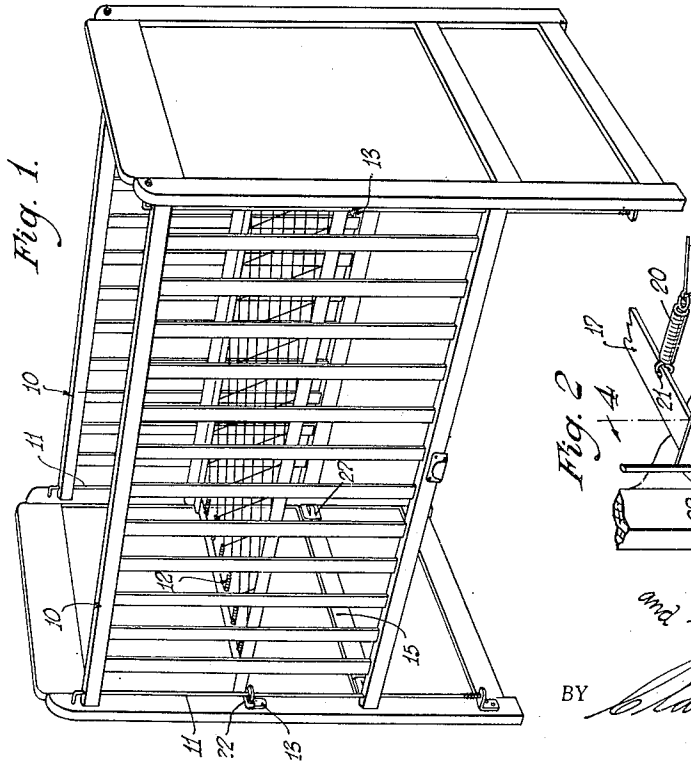



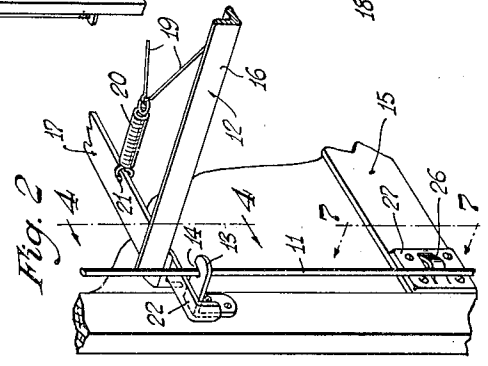




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# UNITED STATES PATENT OFFICE

2,234,261

## TWO-WAY SPRING FOR INFANTS' CRIBS

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Application June 19, 1939, Serial No. 279,780

2 Claims. (Cl. 5—93)

This invention relates to improvements in an infant's crib and has as its principal object the provision of an adjustable two-way spring mattress structure especially adapted for use with the type of crib having opposite drop sides and guide means at the corners of the crib cooperating with the drop sides, the improved spring structure having means adapted to cooperate with the guide means for attaching the spring in an elevated position nearer the top of the crib so that the infant may be more easily reached during its earlier period, the spring mattress being lowered to its usual position when the child reaches a stage of activity where the protection of the drop sides is necessary.

Viewed from another aspect, it is an object of the invention to provide an adjustable spring mattress with means for mounting the same at different levels of elevation relative to the sides of the crib.

A more specific object is the provision of a spring mattress structure for cribs in which the structure includes a frame provided with V-shaped crossbars at its opposite ends from which are struck prongs for attaching the spring at its usual level, together with pivoted supporting arms mounted at the juncture of the ends of the crossbars with the side rails and adapted to swing into and out of operative position, the crossbars having a depending flange adapted to limit the pivotal movement of the supporting arms.

Other objects and advantages peculiar to the invention reside in certain details of construction and the arrangement of parts in the illustrative embodiment described hereinafter in view of the annexed drawing, in which:

Fig. 1 is a perspective of the crib with the mattress spring in elevated position;

Fig. 2 is a fragmentary perspective detail of the means for mounting the mattress spring in elevated position;

Fig. 3 is an enlarged perspective fragment of the pivoted supporting arm structure at the juncture of the frame members;

Fig. 4 is a vertical sectional detail through the juncture of the frame rail members as viewed in the direction of line 4—4 of Fig. 2;

Fig. 5 is a vertical sectional detail along line 5—5 of Fig. 4;

Fig. 6 is a vertical sectional detail similar to Fig. 4, showing the manner of mounting the mattress spring in lowered position;

Fig. 7 is an enlarged elevational detail of the mounting cleat of Fig. 6 looking in the direction of line 7—7 of Fig. 2; while

Fig. 8 is a bottom plan view along line 8—8 of Fig. 6.

In the preferred arrangement shown in Fig. 1, there is employed a usual form of crib structure provided with opposite drop sides 10, each of which is mounted on rods 11 passing through the opposite ends of the side rails for vertical movement into and out of elevated position relative to a mattress spring structure generally indicated at 12.

The mounting means for the drop sides includes a guide cleat disposed at each of the four corners of the crib between the upper and lower ends of the mounting rods 11, detailed views of these cleats being seen in Figs. 2, 5 and 8. The cleats 13 are notched as at 14 to receive the rods 11 and are situated approximately one-third the distance toward the top of the crib from the normal mattress mounting level which corresponds to the level of the rails 15.

The improved mattress spring structure 12 includes side rails 16 joined by cross or end rails 17, all of which are of V cross section, the rails 16 being turned up to provide mounting flanges for the mattress and also for the spring structure, and the end rails 17 being turned down to provide depending flanges 18 for purposes hereinafter to appear. The usual interlaced supporting struts or wires 19 are variously secured to the horizontal flange parts of the side rails 16 and to spring members 20 anchored as at 21 in the horizontal flange portions of the end rail 17. The cross and side rails are joined at their ends by any usual means, such as welding or the like, to provide a rigid frame, and at each corner of this frame corresponding to the junctures of the end and side rails there is mounted an adjustable supporting arm 22 having an offset end portion 23 and secured by means of a pin or rivet 24 in position on the under side of the cross rail. If desired, the pins 24 may also be utilized to secure the rails in assembled relation.

The arms 22 are adapted to fold beneath the side rails 16 out of obstructing position as shown in Figs. 3 or 8, or to swing outwardly of the frame into the positions shown in Figs. 2 and 5 for supporting engagement with the cleats 13, the offset end portions 23 engaging the cleats to prevent dislodgement of the arms therefrom. In Fig. 8 it should be observed that the arm 22 may be pivoted fully back against the flange 18.

The outward pivotal movement of the several supporting arms 22 is limited by the downturned flange portions 18 of the end rails 17.

The members 22 therefore constitute a retract-

able means adapted to cooperate with the guide means 13 for supporting a mattress spring at a position above the normal mounting level 15 nearer the top of the crib and the drop sides 10, so that the infant will be more accessible during its earlier stages of development when it is not active enough to escape from the relatively low side guards. It will also be evident that the downturned flange portions 18 constitute a stop means for the retractable means 22 so that the latter may be swung out to the limit of their movement for disposition in properly aligned position for engagement with the guiding cleats 13.

Means for mounting the mattress spring structure 12 in a normally lowered position at the level corresponding to the rails 15 on the crib, includes the provision of out-struck fingers 25 (Figs. 4 and 5) which are punched from the depending flange portions 18 of the crossbars at a point thereon close to the pivotal mounting 24 of the supporting arms 22. The fingers 25 fit into strap portions 26 formed or punched from cleats 27 (Figs. 2, 7 and 8) secured at the four corners of the crib at the level of the rails 15. In mounting the mattress spring in lowered position, the arms 22 are retracted into the position of Fig. 3 and the fingers 25 fitted in behind the straps 26 on the several cleats, thus affording greater depth within the crib for the safety of the infant in its later stages of growth. The drop sides 10 may be lowered and raised relative to the mattress structure in both of its positions, that is, at the level 15 or the relatively higher level opposite the guides 13.

The various advantages and objects of the invention may be accomplished by modifications of the particular embodiment specifically described herein, and it is intended that the appanded claims shall include all equivalent arrangements fairly coming within their call.

Having thus described our invention, what we claim as new and desire to protect by Letters Patent is:

1. In a crib having movable side walls with guide means and rigidifying brackets therefor arranged at four corners of the crib, the combination with said guide rigidifying brackets of a mattress spring including a frame provided with swiveled supporting members at four corners thereof and each movable from an ineffective retracted position beneath the frame into position for suporting engagement with said guide rigidifying brackets.

2. The combination with a crib having opposite drop sides and guide means and rigidifying brackets therefor arranged at four corners of the crib, of a spring structure including a frame having crossbars at its opposite ends each provided with a depending flange and a retractable supporting arm pivotally mounted at each of the corners of the frame at the juncture of said ends with the sides thereof and each adapted to be moved from a retracted position beneath the frame to an extended position for supporting engagement with said guide rigidifying brackets at a corresponding corner of the crib, said depending flange portions being arranged and constructed to limit the pivotal movement of said arms into and out of retracted and extended position.

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SAMUEL KROLL.