July 21, 1959 A. G. FELDMAN 2,895,144

CRIB SPRING CONSTRUCTION

Filed Aug. 5, 1957

Fig. 2

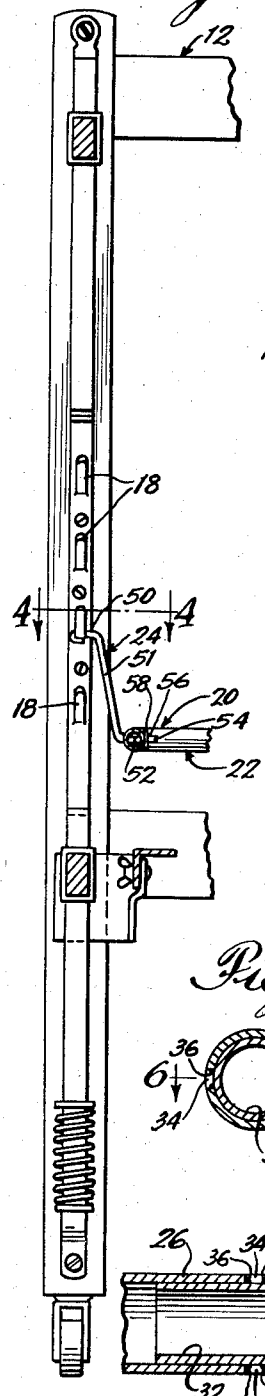


Fig. 1

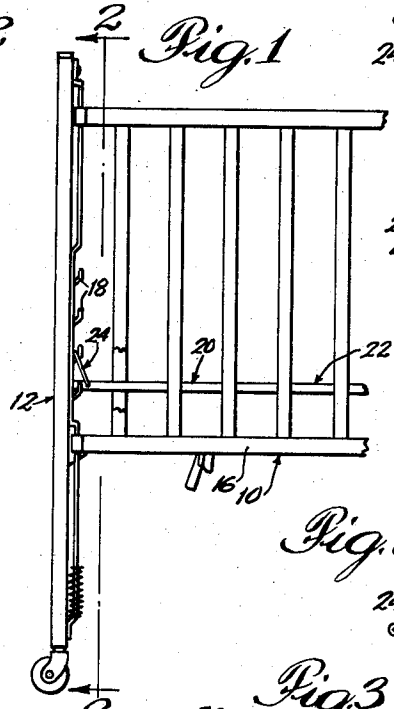


Fig. 7

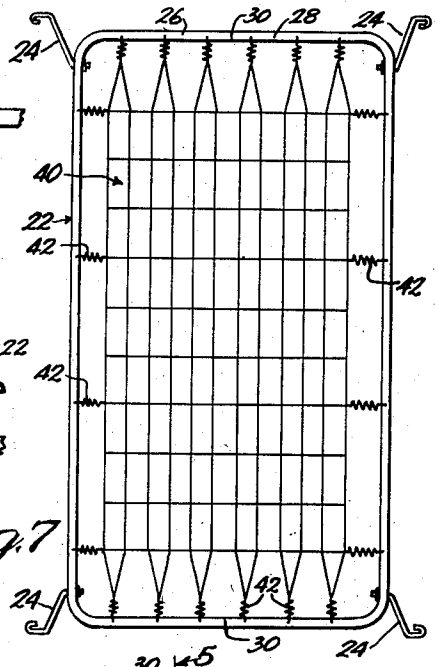


Fig. 3

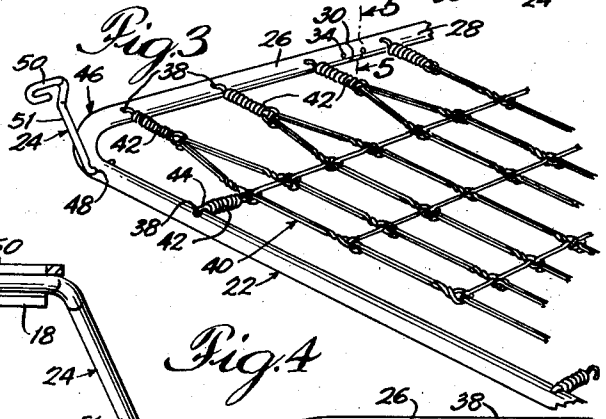


Fig. 5

Fig. 4

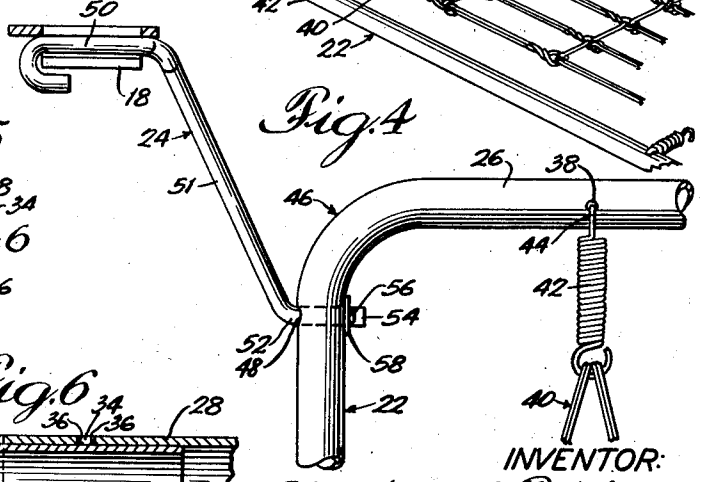
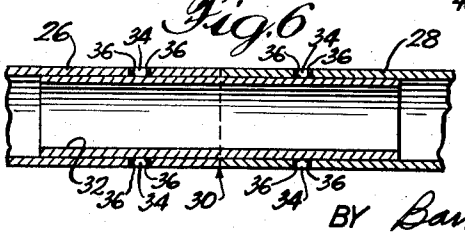


Fig. 6



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United States Patent Office 2,895,144 Patented July 21, 1959

2,895,144

CRIB SPRING CONSTRUCTION

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Application August 5, 1957, Serial No. 676,161

2 Claims. (Cl. 5—207)

This invention relates to a bed spring construction and more particularly to a spring construction for a child's crib.

Heretofore, crib springs have been of generally rectangular shape and have been constructed of four structural members, which serve as the sides of the rectangle, and which are connected at their ends to adjacent members defining the frame. The spring itself, usually a latticework, is located centrally of the rectangular framework and is connected by appropriate means to the structural members. Such a prior spring construction is usually weak in torsion and will distort substantially when one end of the spring is twisted relative to the other end of the spring.

One object of this invention is to provide a new and novel crib spring construction wherein the framework thereof is very rigid and is highly resistant to such torsional flexure.

Another object of this invention is to provide a crib spring construction which is characterized by its simplicity and inexpensiveness of construction, and by its improved strength and rigidity features.

Further objects and advantages of this invention will become apparent as the following description proceeds and the features of novelty which characterize this invention will be pointed out with particularity in the claims annexed to and forming a part of this specification.

A preferred embodiment of the invention is shown in the accompanying drawings, in which:

Figure 1 is a fragmentary side elevation view of a child's crib equipped with a crib spring constructed in accordance with the invention;

Figure 2 is an enlarged fragmentary view taken on line 2—2 of Figure 1;

Figure 3 is a perspective view of a fragment of the novel crib spring construction disclosed herein;

Figure 4 is an enlarged plan view of a fragment of the spring, showing the supporting hook therefor;

Figure 5 is a cross-section view of one of the two similar joints in the crib spring's framework, and is taken on line 5—5 of Figure 3;

Figure 6 is a cross-section view taken on line 6—6 of Figure 5; and

Figure 7 is a plan view illustrating the complete crib spring.

Referring now to the drawings, there is shown in Figure 1 a child's crib generally indicated at 10, having a pair of end panels 12 and drop sides 16. The two corner posts on each end panel 12 each carry thereon hardware which defines a plurality of upwardly extending vertically spaced hook-receiving members, or tongues, 18. One of such corner posts is illustrated in Figure 2 wherein a plurality of such upwardly extending hook-receiving members 18 are shown. The members 18 are for the purpose of supporting thereon the crib spring at selected elevations, as is well understood in the art.

The spring of the instant invention is generally indicated at 20 and includes a framework 22 and four independently mounted and independently pivotable support hooks 24, each of which is similarly connected to the framework 22 adjacent one of the corners of the framework.

Referring back to the framework 22, said framework 22 is defined by two U-shaped, complementary, tubular frame members 26 and 28 which are arranged so that the terminals of the legs of the U are juxtaposed at a pair of joints 30, one of which is seen in Figure 3, to define the generally rectangular tubular framework 22. For the purposes of rigidifying the framework 22, particularly at the two joints 30, which occur between the two U-shaped members 26 and 28, there is provided at each joint 30 an aligning and rigidifying member 32, in the form of a tubular stud that is slip-fit into each pair of juxtaposed terminals of the frame members 26 and 28, and which aligning member 32 bridges the space between the terminals.

There is provided, adjacent the terminal ends of the legs of members 26 and 28 a plurality of apertures 34, and when the frame members are properly aligned and assembled, ready for final connection, then the frame members 26 and 28 are welded as at 36 to the telescoped aligning member 32, access being had to the aligning member 32 through the apertures 34. The length of aligning member 32 is greater than the spacing of apertures 34 in the adjacent legs of frame members 26 and 28.

The framework 22 is also provided with a plurality of spaced apertures 38 formed in the inner periphery of the tubular frame 22. The spring 20 includes a spring latticework 40, of a construction well known in the art, and a plurality of coil springs 42 which connect the latticework 40 to the framework 22. The coil springs 42 are provided with open hook ends 44 for entrance into the tubular interior of framework 22 through the aperture 38 for attaching the spring latticework 40 to the frame 22.

The U-shaped members 26 and 28 may be formed from lengths of tubing which are suitably bent to form the U shape as seen in the drawings. The foregoing construction, including the rounded corners 46, provides a very rigid spring 20 which is highly resistant to torsional flexure.

The framework 22 is also bored diametrically at 48 adjacent each of the four corners of the frame to provide journal means whose axes lie in the plane of the framework 22. Four supporting hooks 24 are provided for the crib spring 20; one such hook being provided adjacent each corner of the frame. Each hook member 24 includes a tongue-engaging portion 50, for engagement with the upwardly extending tongue 18 on the corner post; a diagonal connecting portion 51, which is of a length and at an angle so that said portion 50 extends out beyond any projection of the edges of the spring framework; and a relatively short mounting leg 52. The mounting leg 52 of each hook member 24 is greater in length than the diameter of frame members 26 or 28, and said leg is pivotally mounted in a journal means 48 in the frame 22, with the terminus 54 of the mounting leg positioned inwardly of the frame 22. The terminus 54 of the mounting leg 52 is bored to receive therethrough a cotter pin, or other restraint, 56 which is selectively removable from the leg 52 and which is adapted to engage a washer 58 which is positioned on leg 52 between the restraint 56 and the inner periphery of frame 22. The restraint 56 operates to keep the hook member 24 properly mounted on spring frame 22.

From the foregoing, it will be seen that there is provided a crib spring which is of very rigid construction and is resistant to torsional flexure, and one that is characterized by its simplicity and inexpensiveness of construction.

While there has been shown and described a particular embodiment of this invention, it will be obvious to those skilled in the art that various changes and modifications may be made therein without departing from the invention, and therefore, it is intended in the appended claims to cover all such changes and modifications as fall within the true spirit and scope of the invention.

What I claim as new, and desire to secure by Letters Patent of the United States, is:

1. A crib spring construction comprising, in combination, a generally rectangular tubular frame, four independently movable supporting-hook members connected to the frame adjacent the corners thereof, each hook member including a mounting leg at one end thereof of greater length than the diameter of the tubular frame members, the tubular frame members being diametrically bored adjacent the corners of the frame to define journal means whose axes lie in the plane of the frame, and the mounting leg of each hook member being pivotally mounted in said journal means for rotation about an axis located in the plane of the frame with the terminus of the mounting leg positioned inwardly of the frame, and selectively removable means on the terminus of said mounting leg located inwardly of the frame for engaging the inner periphery of the frame to maintain the hook member on the frame.

2. A crib spring construction comprising, in combination, a pair of generally U-shaped, complementary, tubular frame members arranged so that the terminals their

legs are juxtaposed to define a generally rectangular tubular frame, a plurality of spaced apertures formed in the inner periphery of the tubular frame, spring means disposed centrally of said rectangular frame and providing a plurality of open hook ends for entrance through said apertures for attaching the spring means to the frame, four independently movable supporting-hook members connected to the frame adjacent the corners thereof, each hook member including a mounting leg at one end thereof of greater length than the diameter of the tubular frame members, the tubular frame members being diametrically bored adjacent the corners of the frame to define journal means whose axes lie in the plane of the frame, and the mounting leg of each hook member being pivotally mounted in said journal means for rotation about an axis located in the plane of the frame with the terminus of the mounting leg positioned inwardly of the frame, and selectively removable means on the terminus of said mounting leg located inwardly of the frame for engaging the inner periphery of the frame to maintain the hook member on the frame.

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