UNITED STATES PATENT OFFICE

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CONSTRUCTION OF CRADLES

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2 Claims. (Cl. 5—109)

Our invention pertains to the construction of cradles, the structural design being specifically adapted for use with cradles described in our previous application on Cradles, Serial Number 21,938, filed on April 19, 1948. As pointed out in said application, the cradle of our invention includes electromagnetic means to impart to the cradle a continuous, rocking motion. The structure contemplates upright standards on a horizontal base and cord suspension of the cradle from said standards. The present improvement is directed to such a structural design of said cradle that the supporting standards and cords depending therefrom are entirely concealed within the walls thereof and that the cradle presents a pleasing outward appearance, conforming generally to the outward appearance of conventional pieces of furniture in its line.

We shall now describe our improvement with reference to the accompanying drawings in which:

Figure 1 is a perspective view of our cradle;

Figure 2 is a longitudinal, sectional view thereof, somewhat enlarged, on line 2—2 of Figure 1;

Figure 3 is a sectional view on line 3—3 of Figure 2;

Figure 4 is a vertical, sectional view on line 4—4 of Figure 3;

Figure 5 is a vertical, sectional view on line 5—5 of Figure 2;

Figure 6 is an enlarged side elevation of a detail of construction of said cradle.

Similar numerals refer to similar parts throughout the several views.

The cradle, or what may be called a cradle proper or the bed part thereof, is mounted on a base which consists of two parallel planks 10 joined by a board 11, said board supporting a cross board 12 serving as a base for the actuating mechanism generally indicated by numeral 13. Rising from each end of board 11 is an upright standard 14 including a light-weight extension 15. A cross beam 16, U-shaped in cross section and disposed at the top of said extension 15, is provided with eyes 18 for attachment of a cord 19.

Each end member of said cradle proper includes a frame 20 composed of two upright stiles 21, a horizontal top rail 22 and a horizontal bottom rail 23, the latter being in a spaced relation to the base planks 10. Enclosed by said frame 20 is an outside panel 24 and a somewhat shorter inside panel 25, said inside panel extending downwardly from the top rail to the level of the bottom board 26 of said cradle proper. Thus, the frame and the panels form a hollow end wall of the cradle proper. It will be noted, however, that said hollow wall is open from below affording a free space for passage of cords 19 downwardly for attachment to the lower portion of the cradle proper, which will be described presently. Extending between the end members of the cradle, in the upper portion thereof, is a railing 27 which, with a parallel lower member 28 and upright planks 29, joining said railing 27 and said member 28, constitute an open-work of said cradle.

The lower portion of each side of the cradle includes a panel 31 framed by the lower portion of stiles 21, said member 28 and a bottom rail 30. The space under the bottom board 26 of the cradle proper is utilized for a drawer 34a, slideingly disposed on supports 32. The cords 19, previously mentioned, are attached at their lower end to eyes 33 affixed to the bottom rails 30 so that the cradle proper swings on said cords from the cross beam 16.

The actuating mechanism, generally indicated by numeral 33 and described in our application, Serial Number 21,938, consists of an electromagnetic device and includes an arm 34 which, by means of a forked end, engages a cross pin 35 on the under side of the bottom board 26 of the cradle proper. The pin is supported by means of brackets 35. To secure an even swing of the cradle proper and to prevent any bumping of the panels 24 and 25 against beam 16, we are employing two parallel guiding arms 37 pivotedally mounted at one end on cross beam 12 and hinged at the other end, 39, by means of pintsles 40 affixed to end rail 23 of the end frame 20, as shown best in Figure 3. The dotted lines 37a and 37b in Figure 3 indicate the extent of the swing of said arms from the pivot connections 38.

Finally, as a means of locking the cradle against rocking, we are employing a rod 41 mounted on the inner side of one bottom rail 30 as best shown in Figures 3 and 4, one end of the rod being controlled by means of a crank 44 mounted on shaft 45, said shaft being actuated by a knob 43, the other end of the rod fitting into a vertical slot 42 in the base plank 10 as shown best in Figure 6. The solid lines in said figure show the position of the rod with respect to slot 40 in what is the locked position of the cradle. Dotted lines 41a show the rod in its open position, that is, in the position where the rod is out of slot 40 after having been shifted within a short, U-shaped bracket 46, mounted on rail 33, in the direction of said crank 44.

To conclude the description of the cradle, we
wish to add that numeral 17 indicates a mattress disposed within the cradle proper.

In operation, the cradle, including the frames 20, will be rocked back and forth by means of lever 34 of the actuating mechanism 13, said cradle being guided in its rocking motion by means of said guiding arms 37.

It will be understood that some changes may be made in the construction above described, without deviating from the inventive principle disclosed herein.

What we, therefore, wish to claim is as follows:

1. A cradle of the kind described, including a stationary oblong base, an upright standard at each end of the base, a cross beam at the top of each standard, the cross beams being disposed parallel to each other and disposed at right angles to the longitudinal axis of the base, and a cradle proper disposed for a rocking movement over said base, said cradle proper including two hollow end members slightly spaced at the bottom from said base, two side members including panels extending downwardly to a level adjoining said stationary base, a bottom member in said cradle proper in a spaced relation to the base, each hollow end member including two parallel panels in a spaced relation to each other to fit over and to conceal said upright standard and the cross beam thereon, cord means extending from the beam and attached to the lower portion of each end member for suspension of said cradle proper, motor means on said base and between the side panels, means actuated by said motor means to impart to the cradle proper a swinging, pendulum-like movement laterally, with respect to the base, and two horizontally disposed, parallel arms spaced from each other, the arms being at one end pivotally affixed to the base and being, at the other end, pivotally affixed to the lower portion of one end member of the cradle proper to guide the same in a swinging movement to prevent frictional contact of the inner walls of both end members of the cradle proper with the upright standard and the beams thereon.

2. A cradle of the kind described, comprising a stationary oblong base, an upright standard at each end thereof, a cross beam at the top of each standard and a cradle proper, comprising two side members and two hollow end members, both the side and the end members being, at their lower ends, slightly spaced from said base, each of said hollow members enclosing the upright standard, and the cross beam thereon, cord means extending from the cross beam to the lower portion of each end member, motor means on the base and under the cradle proper, means actuated by said motor means to impart to the cradle proper a swinging, pendulum-like movement, and horizontally disposed arm means pivoted at one end on said base and pivotally connected at the other end to the lower portion of one end member of the cradle to guide the movement of said cradle and to prevent its swinging longitudinally with respect to the longitudinal axis of the cradle.

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