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BABY CRADLE ROCKED BY ELECTRICITY

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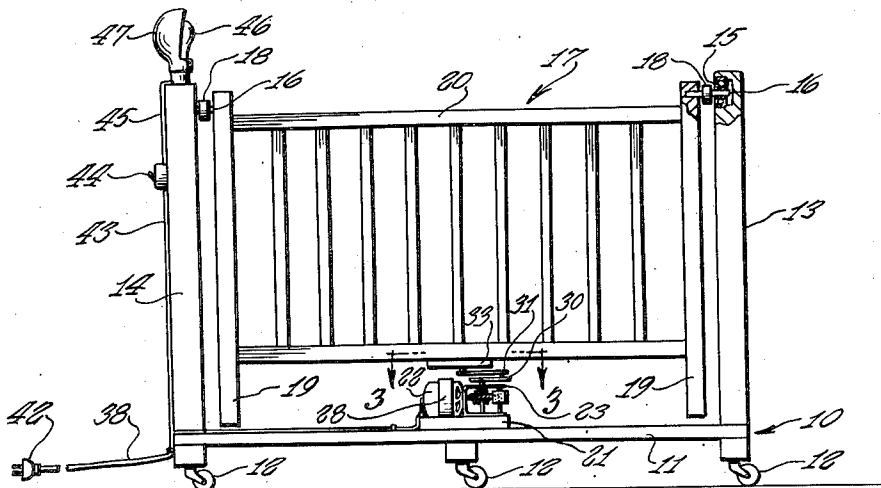


Fig. 1

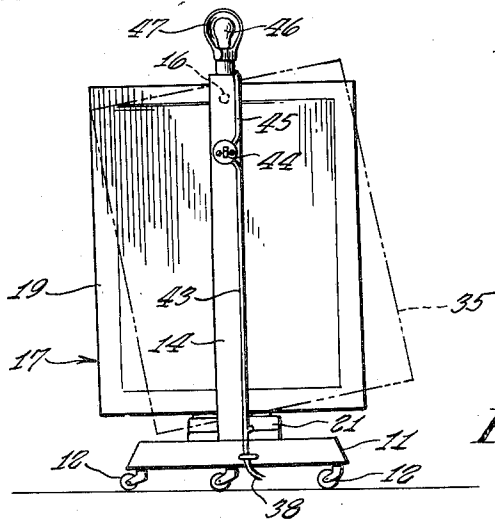


Fig. 2

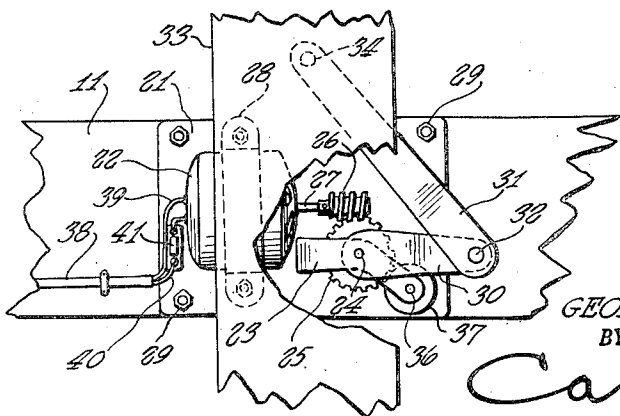


Fig. 3

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BABY CRADLE ROCKED BY ELECTRICITY

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2 Claims. (Cl. 5-109)

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This invention relates to mechanically rocked cradles and beds for infants and children, and especially to the type in which the cradle is movably supported by a stationary frame provided with mechanism for rocking the cradle in situ.

The main object of my invention is to have a cradle or the like which may be mechanically rocked for as long or short a period of time as may be desired without the necessity of personal attention or manual rocking of the cradle.

Another object is to have such a cradle with means for controlling the mechanical rocking, at will, for starting, stopping and also governing the speed of the rocking to slow easy rhythm or more rapid movement.

A further object is to provide such a cradle with a stationary base having end supports for said cradle and an electric motor mounted upon the base beneath the cradle with appropriate crank and link connections from the motor to the cradle to rock the latter.

It is also an object of my invention to provide the frame supporting the cradle with an electric light to illuminate the interior of said cradle when the infant in it requires attention.

It is even an object to make the cradle of any suitable material such as wood, metal, plastics or any combination of these.

Other objects and the advantages of my invention will appear more fully in detail as the specification proceeds.

In order to bring out the salient features of the invention in readily comprehensible form, a practical embodiment of the same is illustrated in the accompanying drawing forming part hereof, and in which,

Figure 1 is a side elevation of a mechanically rocked cradle made according to the invention and disclosing the general arrangement and relation of the base, cradle and drive mechanism for rocking said cradle;

Figure 2 is an end elevation of the same base and cradle;

Figure 3 is an enlarged fragmentary section taken on line 3-3 in Figure 1.

Throughout the views the same or like parts are indicated by the same reference numerals.

It is a rather familiar fact that when infants are to be put to rest, it is frequently necessary to lull them or rock them to sleep, although this may prove to a tedious process, especially if the infant is restless and requires to be rocked for a long time. Rocking a cradle or agitating a crib or the like for a matter of an hour or more by

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hand is tiresome, and may cause the parents who must do this to be too tired the following day to do effective work of any kind. For these and other reasons, it is highly desirable to have a cradle so mounted and equipped that it can be rocked with easy mechanical regularity for any length of time which may be required, and it is now therefore proposed to provide such a crib or cradle construction which simultaneously has certain advantages in addition.

Hence, in the practice of my invention, and referring again to the drawings, a supporting base, generally indicated by 10 consists mainly of an elongated board member 11 provided with a group of casters 12, 12, etc., allowing the base to be rolled along the floor to desired position for the cradle. Upon this base is fixed an upright post 13 at one end and a similar post 14 at the other end, each post having a bearing 15 at its upper end for supporting a pin 16 of the cradle, generally indicated at 17, the pin having in each case a spacing block 18 mounted on the same to keep the cradle out of actual contact with the posts so that it may swing freely upon its end pins in the post bearings. The cradle 17 consists of two end frames 19, 19 connected together by means of side frames 20 (one shown) and, of course a spring of conventional type (not shown). The previously mentioned pivot pins 16, 16 which engage in bearings 15 are fixed in the upper ends of the end frames 19, 19 as particularly shown in Figure 1 and project horizontally outward therefrom.

Upon the base board 11 is mounted a motor base 21 supporting an electric motor 22 and a fixed metal frame 23 of substantially U-shape forming the support and bearing member for the drive mechanism primarily including an upright shaft 24 having a worm gear 25 fixed thereon and meshing with a worm 26 mounted on the motor shaft 27 so as to be driven by said motor. The motor is held in place by a strap 28 having the ends thereof screwed or otherwise secured to the motor base 21, which in turn is held in place upon board 11 by means of screws or bolts 29, 29, etc. Upon the upper end of driven shaft 24 is secured a crank lever 30 which positively rotates in a horizontal plane with said shaft, and at its free end is pivotally connected to a link 31 by means of a pivot pin 32, the link being connected at its other end to a cross board 33 by means of a pin or bolt 34. This cross board forms part of the crib and is secured to the lower edges of the side frames 20 of the crib or cradle, so that when the motor drives the shaft 24 through gear

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25, crank lever 30 then rotates and transmits its rotary movement through link 31 to the cross board 33 at the bottom of the cradle, with the result that the latter is rocked as indicated in broken lines in Figure 2 at 35.

In order to properly lubricate the worm gear and incidentally also the worm, a roller shaft 36 is also mounted for rotation in U-shaped frame 23 with a soft roller 37 of porous material rolling in contact with worm gear 25, the roller being charged with oil.

The motor has a cable 38 conducting electric current thereto, this cable being divided into two conductors 39, 40 on base 21, the one going directly to the motor and the other having a fuse 41 interconnected therein as it also leads to the motor, the fuse serving to protect the motor from current surges and damage. The cable has a plug 42 for plugging into an outlet, while an upwardly extending portion 43 is secured upon post 14 with a switch 44 connected into the circuit for starting and stopping the motor. A branch 45 of the cable extends to the top of the post which is surmounted by a lamp 46 connected to said branch cable and a shade 47 which is so mounted that it can be turned about the lamp, either to throw the light over the cradle or away from the same. This lamp may be connected into the circuit independently of the motor, or it may be in the circuit so as to be controlled by switch 44, if desired.

Thus, when the plug is inserted into a wall socket or outlet and the switch turned on, the motor will rotate crank lever 30 and through link 31 will oscillate the cradle from side to side on pins 16, 16 the stationary bearings 15, and this rocking motion will continue as long as the current is turned on through the switch.

Of course, the cradle may be made of metal such as aluminum, stainless steel, plastic or wood, or any desired combination of such materials, and any other shape than shown may also be used, as may be found useful. On the other hand, control of the current may be included so that the motor will run at slow speed for very gentle rocking of the cradle, or as faster speed for a more rapid rocking.

It is further understood that my invention may be applied on beds for adults as a remedy for sick persons and people having insomnia.

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Manifestly, variations of the construction shown and described may be resorted to, and parts and features may be replaced or used without others within the scope of the appended claims.

Hence, having now fully described my invention, I claim:

1. In a cradle structure, a base frame, upright supports extending upwardly from the base frame, a cradle structure, a cross board connected to the bottom of the cradle structure, means for connecting the cradle structure to the the upright supports for movement with respect thereto, a self-contained driving unit connected to the base frame as a unit, said driving unit comprising a unit base adapted for the connection of the unit with the base frame, an electric motor on the base and having cable means for the connection of the electric motor to an electric source, a U-shaped member resting upon one of its side legs upon the base and connected thereto, a vertically extending shaft journaled in the legs of the U-shaped member, driving gear means between the motor and the shaft for rotating the said shaft, a crank arm fixed to the upper end of the shaft and a link connected between the outer end of the crank arm and the cross board.

2. In a cradle arrangement as defined in claim 1 and said U-shaped member having its leg portions extending beyond the gear means connecting the electric motor with the vertical shaft and an oiling roller connected to the ends of the portions of the legs of the U-shaped member for rotation with respect thereto and engaging with the gear means whereby to lubricate the same.

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