Mar. 20, 1923. 1,449,301.

R. SHEA.

CRADLE ROCKER.

FILED MAY 31, 1922. 3 SHEETS—SHEET 1.

Fig. 1.

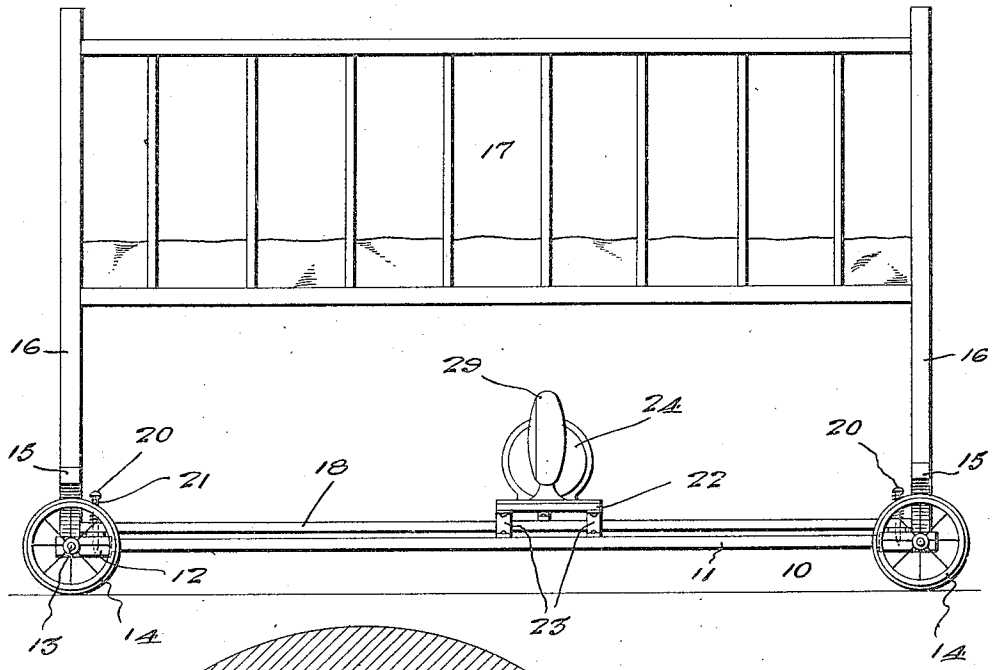
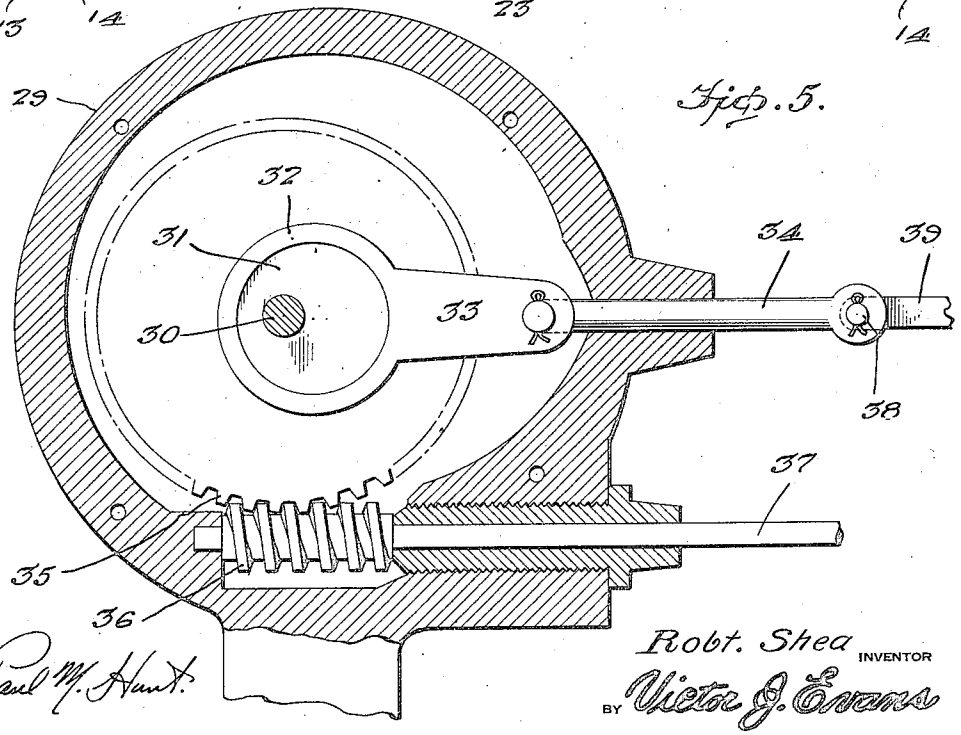



Fig. 5.




Robt. Shea INVENTOR

BY Victor J. Evans

ATTORNEY

Paul M. Hunt

WITNESS:

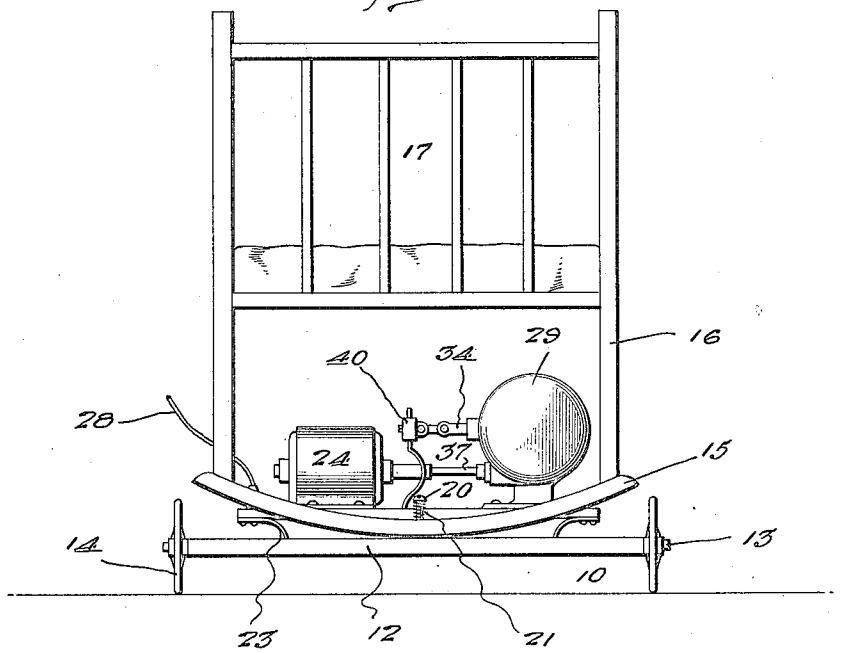
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Fig. 2.



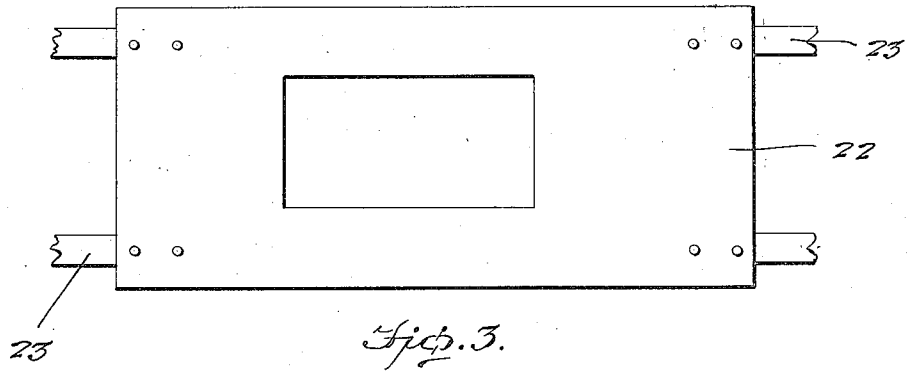




Fig. 3.

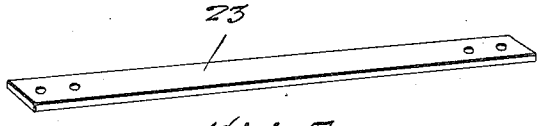



Fig. 7.

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FILED MAY 31, 1922. 3 SHEETS—SHEET 3.

Fig. 4.

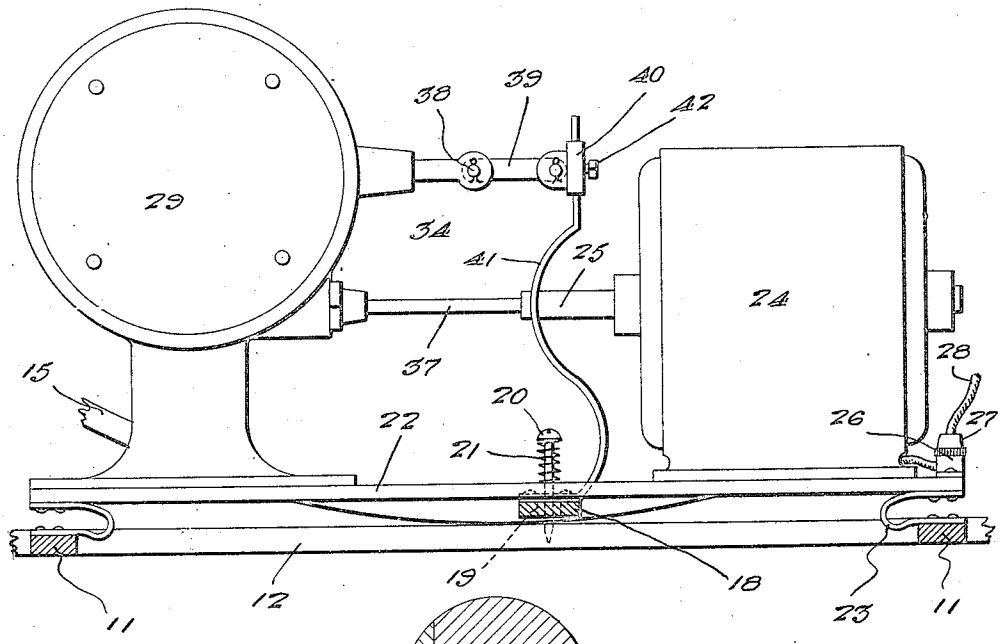
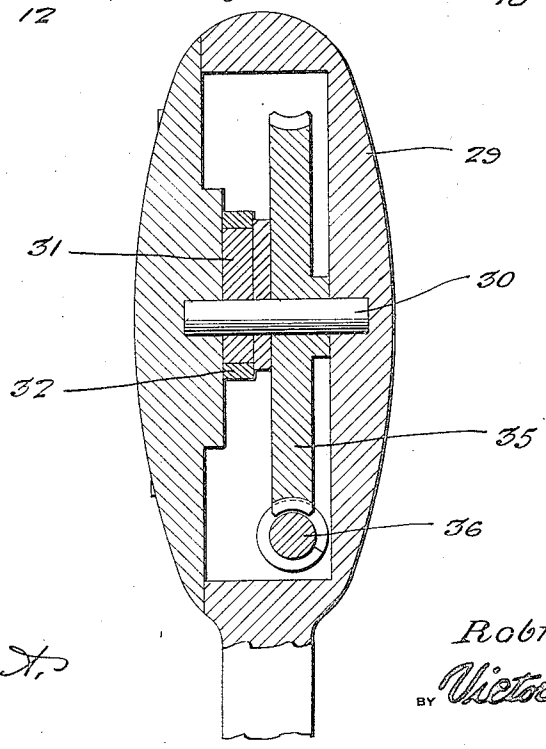



Fig. 6.




Paul M. Hunt.

WITNESS:

Robt. Shea INVENTOR

BY Victor J. Evans

ATTORNEY

Patented Mar. 20, 1923. 1,449,301

# UNITED STATES PATENT OFFICE.

ROBERT SHEA, OF MARTELL, CALIFORNIA.

## CRADLE ROCKER.

Application filed May 31, 1922. Serial No. 565,007.

*To all whom it may concern:*

Be it known that I, ROBERT SHEA, a citizen of the United States, residing at Martell, in the county of Amador and State of California, have invented new and useful Improvements in Cradle Rockers, of which the following is a specification.

This invention relates to nursery apparatus for the care of infants and has for its object the provision of a novel cradle provided with electric motor operated means for effecting a smooth rocking action whereby to lull an infant to sleep.

An important object is the provision of a device of this character which is provided with spring cushion means which will operate to prevent any possible shock or jar and which will therefore have a very smooth and easy action.

Another object is the provision of a device of this character which is so constructed that the degree of movement during the rocking action may be varied at will so that either a long or short stroke may be had.

Another object is the provision of a device of this character which is so constructed that it is mounted upon a wheeled frame, the parts being moreover of such relative size that that the device may be easily wheeled from one room to another without scratching the doors or other wood work.

An additional object is the provision of a novel drive mechanism for effecting the rocking movement, this mechanism being entirely enclosed so as to exclude dust and dirt and to render it more sightly.

An additional object is the provision of a device of this character which will be simple and inexpensive in manufacture, efficient and durable in service and a general improvement in the art.

With the above and other objects and advantages in view, the invention consists in the details of construction to be hereinafter more fully described and claimed, and illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of the complete device,

Figure 2 is an end view thereof,

Figure 3 is a plan view of a portion of the device showing the motor mounting,

Figure 4 is a cross sectional view showing the power mechanism in elevation,

Figure 5 is a detail sectional view taken through the power transmitting device,

Figure 6 is a vertical cross section therethrough,

Figure 7 is a detail section of one of the spring cushion means.

Referring more particularly to the drawings I have shown my device as including a relatively stationary platform 10 which includes longitudinal bars 11 connected at their ends by cross bars 12 which carry axles 13 upon which are mounted wheels 14 which are preferably of wire construction and provided with rubber tires. By this means it will be seen that the device is readily capable of being rolled from place to place wherever its use is desired.

Mounted upon the cross bars 12 are rockers 15 which support legs 16 forming part of an ordinary cradle structure 17 and these rockers are connected by a longitudinal bar 18 which has its ends formed with slots 19 for the passage of screws 20 which are passed into the cross bars 12. Small springs 21 are engaged about these screws and abut against the heads thereof and against the longitudinal bar 18.

The numeral 22 designates a base for the power mechanism and this base is supported upon a plurality of reflexly bent leaf springs 23 which are secured at one end to the longitudinal bars 11 and which have their other ends secured to the base. Mounted upon this base is an electric motor 24 of any conventional or preferred type having a drive shaft 25. The leaves of this motor are brought to a suitable connector 26 mounted upon the base and adapted for engagement by a connector element 27 carried by a conducting cord 28 which may be associated with an ordinary electric socket in the room in which the device is used. It is of course to be understood that in the event that the house is not wired for electric current a storage battery might be used instead.

Also mounted upon the base 22 is the

power transmitting mechanism which includes an upright housing 29 through which is journaled a shaft 30 carrying an eccentric 31 encircled by an eccentric strap 32 which has an arm 33 connected with a rod 34 which is slidable through one side of the housing. Secured upon this shaft 30 is a worm wheel 35 which meshes with a worm 36 on a shaft 37 which is journaled in the housing and which has any suitable drive connection with the motor shaft 25. Pivoted at 38 upon the free end of the rod 34 is a link 39 which carries a sleeve 40 engaged upon the upper end of a rather stiff leaf spring 41 which is secured to the longitudinal bar 18. A suitable set screw 42 is provided in the sleeve 40 for maintaining the proper connection with the spring 41.

Assuming that the device has been constructed and assembled as above described, the operation is as follows: When the motor is energized the shaft 25 thereof will drive the shaft 37, worm 36, worm wheel 35, shaft 30 and eccentric 31, whereupon the arm 33 and link 34 will be given a reciprocatory motion and owing to the fact that the link 39 is connected with the spring 41 which is in turn connected with the bar extending between the rockers the cradle will be given a rocking movement. Owing to the fact that the member 41 is a leaf spring instead of a rigid arm this movement will be more or less yielding and gentle so that there will be absolutely no abruptness or shock at the end of the strokes. The springs 21 also operate to cushion any possible shock and make the entire action gentle so that an infant within the cradle will be soothed and lulled to sleep. The leaf springs which support the base upon which the power mechanism is mounted absorb any vibration in an obvious manner.

From the foregoing description and a study of the drawings it will be apparent that I have thus provided a simply constructed and consequently inexpensive electrically rocked cradle which will be of distinct advantage in rocking continually and automatically without requiring any attention from the mother or nurse. Owing to the fact that the rockers are short and that they do not extend beyond the sides of the wheeled frame it is apparent that the device may be easily pushed through door ways from room to room without any interference with and damage to the wood work. Owing to the simplicity of the construction and the fewness of the parts it is apparent that there is nothing to get out of order and that the device should have a long life.

While I have shown and described the preferred embodiment of the invention, it is of course to be understood that I reserve the right to make such changes in the form, construction and arrangement of parts as will not depart from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention I claim:

1. A device of the character described comprising a wheeled platform, a cradle having rockers mounted upon said platform, a power mechanism mounted stationary with respect to the platform and including a driven shaft carrying an eccentric, power means for driving said shaft, a reciprocatory arm having an eccentric strap encircling the eccentric, a link connected with the free end of said arm, and an upright spring connected with the rockers and connected with said link.

2. A device of the character described comprising a wheeled platform, a cradle having rockers mounted upon said platform, a power mechanism mounted stationary with respect to the platform and including a driving shaft carrying an eccentric, power means for driving said shaft, a reciprocatory arm having an eccentric strap encircling the eccentric, a link connected with the free end of said arm, and an upright spring connected with the rockers and connected with said link, the connection between the link and spring consisting of a sleeve carried by the link and slidably adjustably engaged upon the spring, and a set screw for maintaining the adjustment.

3. A device of the character described comprising a wheeled platform, a cradle having rockers mounted transversely of and rockable upon the platform, a base secured upon the platform, an electric motor upon the base, a power transmitting mechanism including a housing mounted upon the base, a shaft journaled in said housing and connected with the motor shaft, a worm on said shaft, a second shaft in the housing disposed at right angles to said first named shaft and carrying a worm wheel meshing with said worm, an eccentric on said last named shaft, a strap encircling the eccentric and carrying an arm, a rod slidable through the housing and connected with said arm, a link pivotally connected with the free end of said rod, and an upright leaf spring secured with respect to the rockers and adjustably connected with said rod.

4. A device of the character described comprising a wheeled platform, a cradle having rockers mounted transversely of and rockable upon the platform, a base secured upon the platform, an electric motor upon the base, a power transmitting mechanism including a housing mounted upon the base, a shaft journaled in said housing and connected with the motor shaft, a worm on said shaft, a second shaft in the housing disposed at right angles to said first named shaft and

carrying a worm wheel meshing with said worm, an eccentric on said last named shaft, a strap encircling the eccentric and carrying an arm, a rod slidable through the housing and connected with said arm, a link pivotally connected with the free end of said rod, and an upright leaf spring secured with respect to the rockers and adjustably connected with said rod, a longitudinal bar connecting the rockers at their centers and to which said spring is secured, the ends of said bar being slotted, screws passing through said slots and into the platform, and coil spring encircling said screws and abutting against the heads thereof and against said bar.

In testimony whereof I affix my signature.

ROBERT SHEA.