ELECTRIC GLIDER AND STABILIZER
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This invention relates to mechanical gliders. It is an object of the present invention to provide a power driven glider on which a crib is supported and to which reciprocating gliding movement will be imparted in an improved manner.

It is another object of the present invention to provide a glider which will cause the gliding movements to be smooth and free of jarring action so that the glider will smoothly change its direction of motion without disturbing the person supported thereon in the crib.

It is still another object of the present invention to provide an electric glider and stabilizer of the above type wherein the stabilizer smooths out the rough, irregular gliding action in a novel manner which, due to the arrangement of springs, pulls gently and glides perfectly to induce sleep readily in the infant.

It is still another object of the present invention to provide an electric glider and stabilizer of the above type which is entirely mobile, and wherein the speed of the gliding movement may be varied depending on the age of the infant sleeping in the crib.

Other objects of the invention are to provide an electric glider and stabilizer having the above objects which is of simple construction, has a minimum number of parts, is inexpensive to manufacture and efficient in operation.

For other objects and a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which:

Figure 1 is a side elevational view of a preferred embodiment of the present invention;

Figure 2 is an end elevational view thereof;

Figure 3 is a horizontal sectional view thereof taken along the line 3—3 of Fig. 1;

Figure 4 is a vertical sectional view thereof taken along the line 4—4 of Fig. 1;

Figures 5 and 6 are enlarged fragmentary perspective views of the controller forming a part of the invention; and

Figure 7 is an enlarged fragmentary vertical sectional view taken along the line 7—7 of Fig. 1.

Referring now more in detail to the drawing, 10 represents an elongated rectangular base frame at the opposite ends of which are rotatably mounted the rubber tired wheels 11, substantially as illustrated. A pair of longitudinally spaced vertical posts 12 are secured to opposite sides of the frame 10 and mount at their upper ends a transverse horizontal supporting bar 13. A pair of ball bearing assemblies indicated generally at 14 (Fig. 6) are secured to the undersurface of each of the supporting posts 13 by means of the nuts 16, a washer 17 being provided intermediate the post 13 and each of the nuts 16. A lock nut 18 positioned on the bolts 15 engages the undersurface of the post 13.

An L-shaped metal strap 19 is provided for each of the bearing assemblies 14, being integrally formed at the upper end with a hook shaped portion 20 which is supported through the inner race 21 of each of the ball bearing assemblies. Each of the L-shaped straps 19 is integrally formed with a vertically extending flange 21 which serves to fixedly mount the lower edge of an L-shaped metal sheet or apron 22 by means of the nut and bolt assemblies 23, the horizontal portions of the aprons 22 extending outwardly beyond the posts 13 in vertically spaced relation to thereto (Fig. 1). A transverse horizontal supporting end member 24 is secured to the inner face of each of the aprons 22 by means of a nut and bolt assembly 25, the two supporting members 24 being parallel to one another in a substantially horizontal plane and serving to support thereon a crib indicated generally at 26. Thus, the crib 26 is adapted for gliding movement in opposite directions.

The crib 26 includes the upper and lower frame members 27 and 28, respectively, connected by the vertical bars 29 and the end panels 30, a bottom wall 31 being secured within the lower frame 28 and supporting thereon the mattress 32.

A handle 33 is secured to the top of one of the L-shaped aprons 22 by means of the rivets 34 and flange 35 integral therewith and serves to facilitate the rolling of the device from one room to another.

A support 36 extends between the posts 12, being reinforced by the braces 37, and supports thereon a motor indicated generally at 38 including a housing or casing 39 through which extends an insulated cord 40 adapted to be suitably connected to a source of household power by means of a male plug, not shown. A switch and rheostat 41 are provided for controlling the speed of the motor as well as the operation thereof. A timer, not shown, will also be included to automatically turn the motor on or off after a predetermined period. A flywheel 42 is keyed to the shaft of motor 38 and fixedly carries a pin 43 which pivotally mounts one end of a connecting rod 44.

A controller is provided for connecting the connecting rod 44 to the crib 26 and includes a transverse horizontal member 45 secured to the undersurface of the crib by means of the nut and bolt assemblies 46, the member 45 extending parallel to the connecting arm 44 alongside the latter. A hinge including a plate 47 secured to the member 45 by rivets or bolts 48 and a freely hanging plate 49 is mounted centrally of the member 45. A pin 50 is welded to the plate 49 and rotatably mounts the other end thereof to the connecting arm 44. A coil spring 51 has one end thereof connected to the pin 50 and the other end thereof connected to the member 45 by means of an eye 52. A complementary oppositely disposed coil spring 53 has one end thereof connected to the pin 50 while the other end thereof is similarly connected to the member 45 by means of an eye 54, the tension of the springs 51 and 53 being equal.

In operation, the motor 38 will drive the flywheel 42 which will reciprocate the connecting rod 44 to impart a side to side gliding motion to the crib through the plate 49 and springs 51 and 53, this gliding motion being controlled as regards speed by means of the rheostat 41 and terminating automatically at the end of a predetermined period by means of a timer connected in series with the motor 38. The springs 51 and 53 permit the driving rod 44 to drive through a full stroke with flexibility, the springs acting together to retrack and expand and to permit the crib to move flawlessly. The speed of the motor may be regulated through the rheostat 41 to ride from 20 to 48 glides per minute to complete movements back and forth. The stabilizer or controller smoothes out the motion of the crib under the action of the connecting rod 44 to eliminate the rough motion and irregular...
lar gliding action of the conventional gliders. The stabilizer with the springs 51 and 53 will pull the crib gently to permit perfect gliding action and to induce sleep readily on the part of the infant or occupant.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

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

1. An electric glider comprising frame means including an elongated base frame, a crib, means for mounting said crib within said frame means for gliding action back and forth, mechanical actuating means for imparting gliding motion to said crib, and resilient stabilizer means for controlling the movement of said crib, said actuating means comprising an electric motor mounted on said base frame intermediate the ends thereof and having a motor shaft extending longitudinally of said base frame, a rotary member carried by said motor shaft and a connecting rod eccentrically connected at one end to said rotary member and at the other end to said stabilizer means, said stabilizer means comprising a transverse member secured to the under surface of said crib, a strap hinge having one plate thereof connected to said transverse member, the other plate of said hinge depending freely therefrom, a pin connecting said depending hinge plate to said connecting rod, and a pair of coil springs oppositely disposed and connected at one end to said pin, their other ends being connected to said transverse member, said springs supplying equal tension on opposite sides of said depending plate.

2. An electric glider comprising frame means including an elongated rectangular base frame, a crib, means for mounting said crib within said frame means for gliding action back and forth, electric motor means for imparting gliding motion to said crib, stabilizer means for controlling the movement of the crib, a support connect-