

July 14, 1953

W. G. DAVIS
ELECTRIC CRADLE

2,644,958

Filed May 3, 1951

2 Sheets-Sheet 1

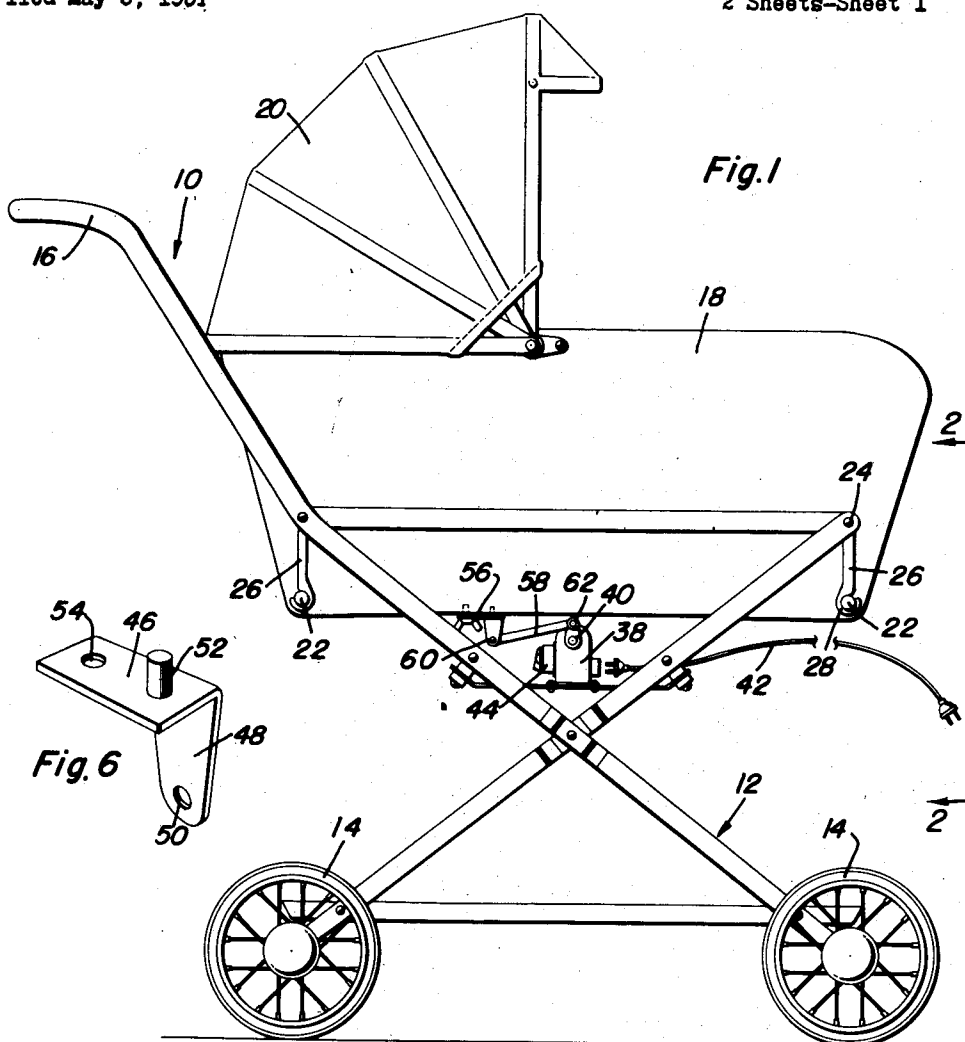


Fig. 6

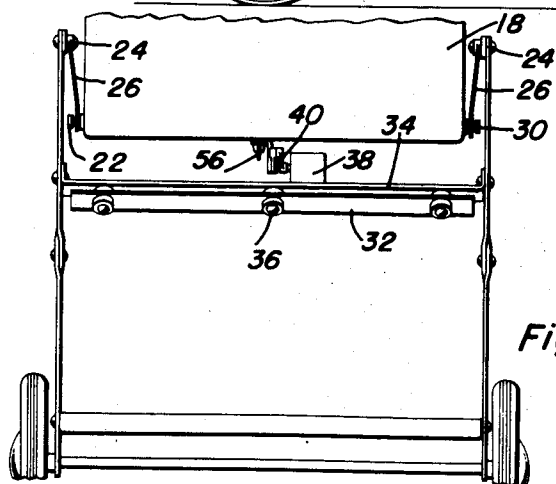


Fig. 2

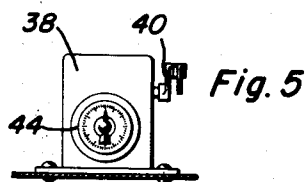


Fig. 5

Warren G. Davis
INVENTOR.

BY *Charles A. Wilson*
and *Harvey B. Jordan*
Attorneys

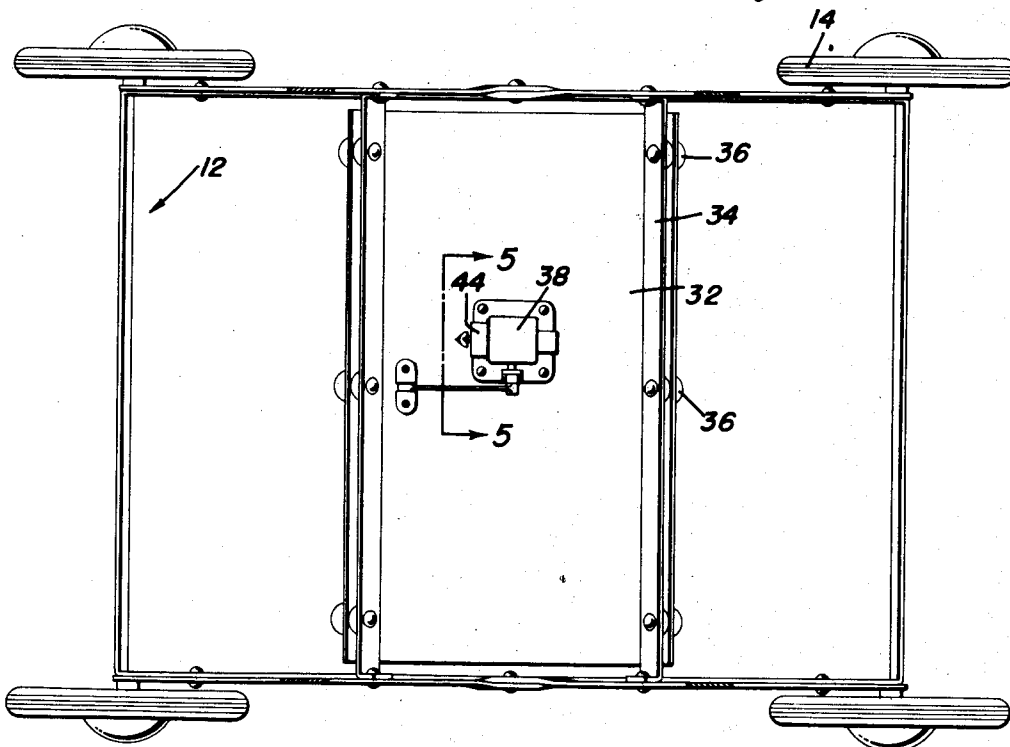
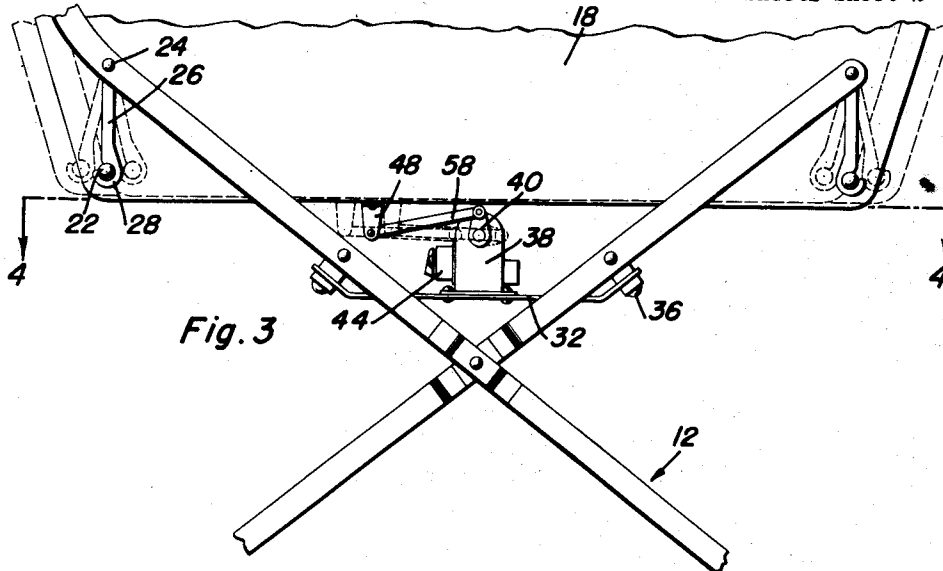
July 14, 1953

W. G. DAVIS
ELECTRIC CRADLE

2,644,958

Filed May 3, 1951

2 Sheets-Sheet 2



Warren G. Davis, INVENTOR.

BY *Alfred A. Brown*
and Harry R. Jordan
Attorneys

UNITED STATES PATENT OFFICE

2,644,958

ELECTRIC CRADLE

Warren G. Davis, Madisonville, Ky.

Application May 3, 1951, Serial No. 224,272

2 Claims. (Cl. 5—109)

1

This invention comprises novel and useful improvements in an electric cradle and more specifically pertains to a power-operated mechanism for rocking or swinging a baby's crib and for controlling the swinging movement thereof.

The primary object of this invention is to provide a mechanism for automatically rocking a baby's cradle and which may be combined in a novel manner with a baby carriage for imparting a swinging movement to the crib thereof.

A further object of the invention is to provide an improved baby carriage having a detachable crib portion which shall be swingably mounted upon the carriage and detachably connected with a power operating mechanism mounted upon the carriage for imparting swinging movement to the crib.

Yet another object of the invention is to provide a device in conformity with the preceding objects in which the power operated mechanism may be automatically controlled as by a time device.

These, together with various ancillary features and objects of the invention which will later become apparent as the following description proceeds, are attained by the present invention, a preferred embodiment of which has been illustrated, by way of example only, in the accompanying drawings, wherein:

Figure 1 is a side elevational view of a baby carriage incorporating therein the principles of this invention;

Figure 2 is a fragmentary end elevational view of the baby carriage of Figure 1, taken from the right end thereof substantially upon the plane indicated by the section line 2—2 thereof;

Figure 3 is a fragmentary side elevational view of a portion of Figure 1, taken upon a somewhat enlarged scale, alternate positions of the crib, the swing support and the operating mechanism thereof being indicated in dotted lines;

Figure 4 is a horizontal sectional view, taken substantially upon the plane indicated by the section line 4—4 of Figure 3;

Figure 5 is a vertical transverse sectional view, taken substantially upon the plane indicated by the section line 5—5 of Figure 4 and illustrating the time control mechanism for the electric motor of the rocking device; and

Figure 6 is a perspective view of a detachable connecting bracket for releasably connecting the automatic rocking mechanism with the crib.

The fundamental purpose of this invention is to provide a power operating mechanism for rocking a baby crib or cradle in order to relieve

2

the parents of this frequently tedious and tiring muscular work; and to provide a mechanism which may be automatically controlled as by a time clock or the like, to thereby free the parents from constant attendance upon the baby.

In accordance with this purpose, the invention has been shown applied to a conventional form of baby carriage indicated generally by the numeral 10, this carriage including the customary frame 12 consisting of spaced pairs of support members pivotally attached to each other, suitable reinforcing members and carriage or crib carrying members, which may be of a foldable or collapsible type if desired. Preferably, the frame 12 is provided with the usual rubber tired wheels 14 and with the handle 16 whereby the carriage is rendered mobile and easily handled.

The carriage further includes a basket or crib portion 18 having the usual foldable top 20 thereon. In the present invention, however, it is preferred to provide the crib 18 with laterally extending trunnions 22 which constitute support fasteners and extend laterally from the lower portions of the crib 18 from both sides thereof. Suitably mounted upon the frame 12 as by pivots 24 are supporting links 26 which at their lower ends terminate in hooks 28 adapted to releasably embrace support fasteners 22, which latter members may conveniently be headed, as at 30, see Figure 2, to prevent accidental disengagement of the links 26 therefrom. It will thus be apparent that the crib 18 is removably mounted upon the frame, for swinging movement by means of the supporting links 26, in a horizontal plane. When desired, the crib may be entirely removed from the frame and separately employed as a conventional crib for a baby. When mounted upon the frame, the crib and base constitute a conventional baby carriage which may be utilized in the usual manner. However, this baby carriage has a swingable crib which may be manually oscillated if desired, but which preferably is provided with an automatic power operated means for oscillating the same, as set forth hereinafter.

The collapsible frame 12 is provided with a supporting platform or base 32, see, in particular, Figure 3, which may be removably secured to transverse support members 34 mounted upon the frame, as by fastening bolts or the like 36. Bolted or otherwise suitably secured upon the platform 32 is an electric motor 38 of any conventional and known form, this motor being provided with a crank arm 40.

The electric motor may be provided with the usual electric circuit, as indicated by the electric

3

conductor 42 of a conventional type. This circuit may further include an electric circuit time control clock 42 of any conventional and known design and which is mounted upon the motor 38. As is readily apparent, the clock could be mounted upon various other portions of the supporting base, or might be operatively connected with an electric circuit in any other desired manner.

The electric clock provides a means whereby the operation of the electric motor may be started at any desired predetermined time; or whereby the operation may be cut off after a predetermined length of operation. The purpose of this arrangement is to enable the user to cause swinging of the baby crib at any predetermined time; or, after the same has started, to cause the swinging motion to stop after a predetermined interval; thus conserving current.

Operating means are provided for connecting the motor 38 with the crib 18 in a detachable manner. This connecting means includes a bracket whose construction, as shown in Figure 6, consists of a base plate 46 having an integral depending lug 48 apertured, as at 50. The plate 46 is provided with an upstanding dowel pin 52 which is adapted to engage in a corresponding dowel pin recess in the bottom of the crib 18, as shown in Figure 1, and also with an aperture 54. When the dowel pin 52 is received in the socket in the crib bottom, it is contemplated that a wing bolt 56, see Figure 1, may be inserted through the aperture 54 for locking the base plate 46 against the bottom of the crib.

It will thus be seen that the bracket is held to the underside of the crib by a single thumb bolt or wing bolt and may be readily and quickly disengaged therefrom. The depending lug 48 has its aperture 50 connected with a connecting rod 58 as by a pivot pin 60. The other end of this connecting rod is pivotally connected at 62 with a crank arm 40.

It will thus be apparent that when the electric motor is energized either manually or by the time clock 44, by means of the circuit indicated by the conductor 42, the continuous rotation of the crank arm 40 on the motor will, through the connecting link 58 and bracket lug 48, impart an oscillating, horizontally swinging movement to the crib 18 which is supported by the links 26. Thus, as indicated by dotted lines in Figure 3, a swinging movement will be imparted to the crib for as long as the motor is operated.

It should be noted that the motor may be manually controlled by omitting the electric control clock or by not using the same, but the device lends itself to substantially fully automatic control by virtue of the time clock control for the electric circuit of the motor.

Since, from the foregoing, the construction and

4

advantage of this electric cradle are readily apparent, further description is believed to be unnecessary.

However, since numerous modifications and equivalents will readily occur to those skilled in the art after a consideration of the foregoing specification and accompanying drawings, it is not intended to limit the invention to the exact embodiment shown and described, but all suitable modifications and equivalents may be resorted to which fall within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. An electric cradle comprising a wheeled collapsible carriage, said carriage including spaced pairs of support members, means pivotally attaching one support member of each pair of support members to the other support member of the respective pairs of support members, a base secured to each of said support members above said means, a crib, means detachably securing said crib to said carriage, an electric motor secured to said base, a time switch operatively connected to said motor for controlling the period of operation of said motor, and connecting means operatively detachably connecting said motor with said crib.

2. An electric cradle comprising a wheeled collapsible carriage, said carriage including spaced pairs of support members, means pivotally attaching one support member of each pair of support members to the other support member of the respective pairs of support members, a base secured to each of said support members above said means, a crib, means detachably securing said crib to said carriage, an electric motor secured to said base, a time switch operatively connected to said motor for controlling the period of operation of said motor, and connecting means operatively detachably connecting said motor with said crib, said connecting means including a crank arm on said motor, a bracket on said crib, and a connecting rod pivotally secured to said bracket and said crank arm, said bracket including a base plate and a connecting plate attached to said base plate, an aperture in said base plate, a dowel secured to said base plate, a socket in said crib, said dowel being received in said socket, and a fastener engaging said crib engaged in said aperture.

WARREN G. DAVIS.

References Cited in the file of this patent

Number	Name	Date
1,676,420	Anderson	July 10, 1928