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Malabanan et al.

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[54] AUTOMATIC MOTORIZED BABY CRIB

[76] Inventors: **Alejandro L. Malabanan,** 36 Recto Avenue, Lipa City; **Antonio T. Acepcion,** Nasugbu, both of Philippines

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[52] **U.S. Cl.** **5/109**

[51] **Int. Cl.** **A47d 9/02**

[58] **Field of Search** 5/109, 108

[56] **References Cited**

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Primary Examiner—James T. McCall
Assistant Examiner—Darrell Marquette

[57] **ABSTRACT**

This invention relates to a motorized baby crib which includes a conventional crib proper with four downwardly extending corner posts, two at the transverse ends thereof. At the bottom end of each post is secured a corresponding roller. Rollers at one transverse end of the crib are positioned for lateral movement in corresponding grooves at the end portions of the transverse base members of the crib base. Transversely aligned at the middle of the crib proper are opposed downwardly extending supports. To the supports are secured the outer ends of a pair of opposed stretched coil springs, the inner ends of which are secured to one end of a push rod, the other end of which is in turn connected to an eccentric arm keyed to the shaft of a gear motor.

1 Claim, 4 Drawing Figures

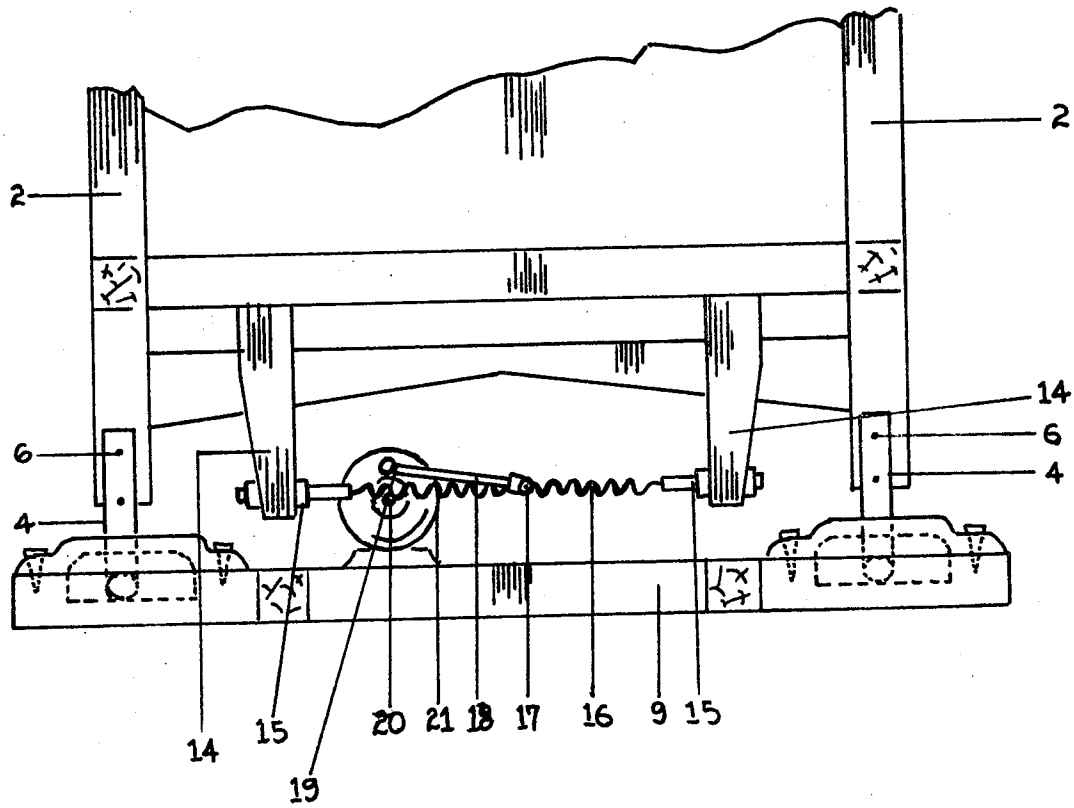
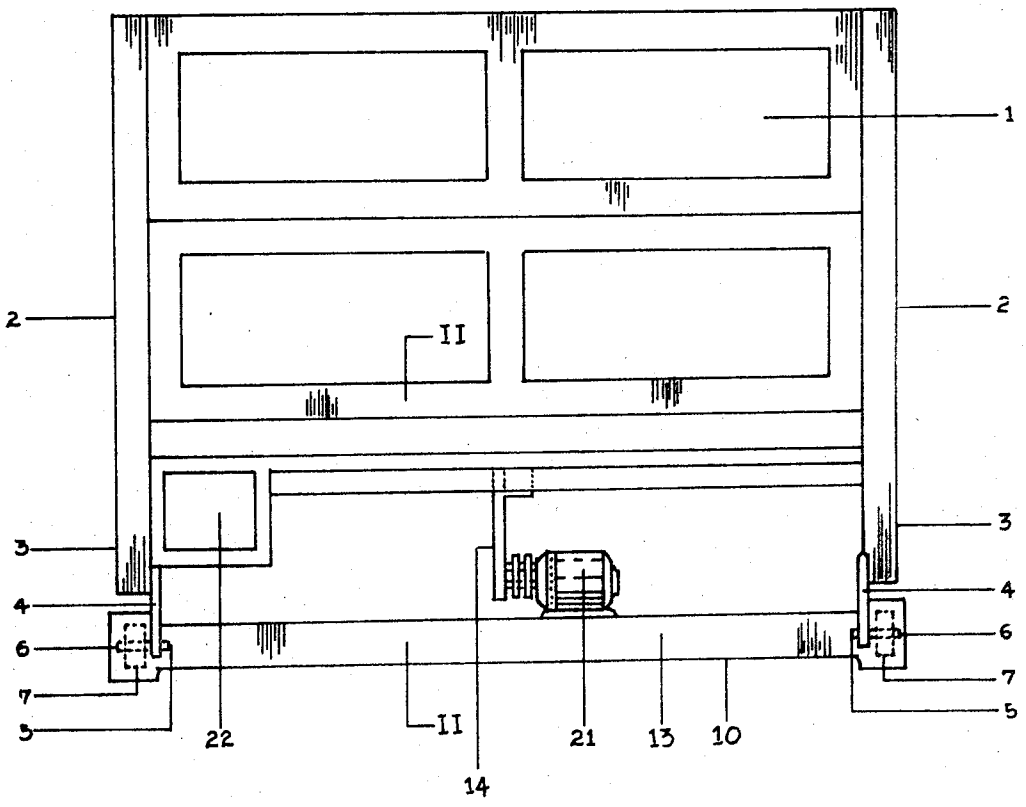


Fig : 1



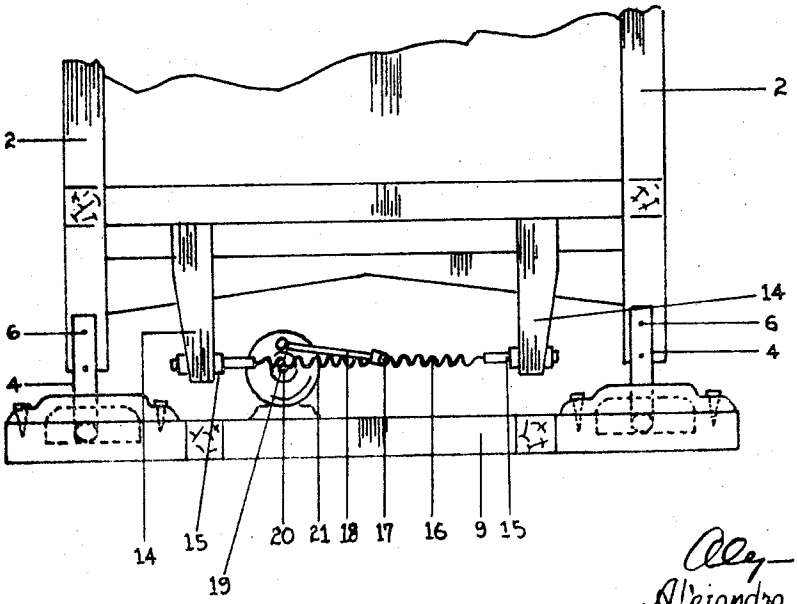
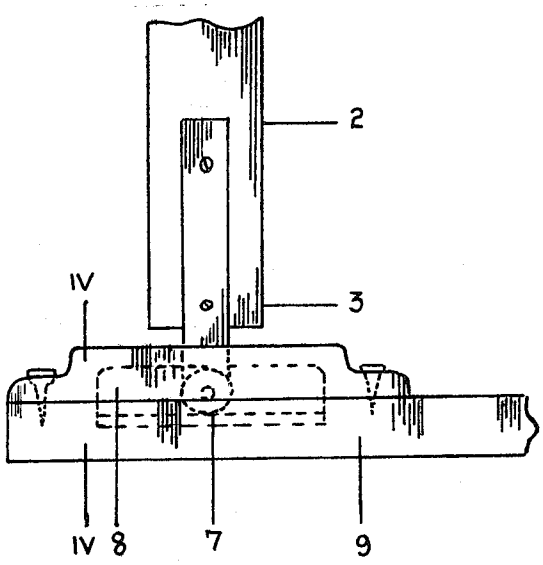


Fig : 2

Alejandro L. Malapanan
Antonio M. Asepcion
INVENTORS

Fig = 3



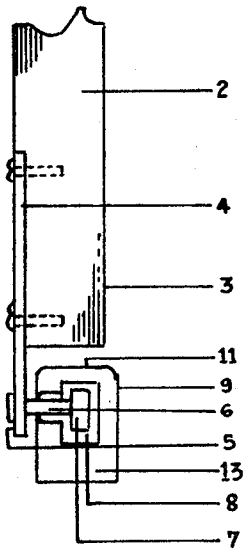


Fig = 4

Alejandro L. Malabanan

Antonio V. Acepcion

INVENTORS

AUTOMATIC MOTORIZED BABY CRIB

This invention relates to an automatic motorized baby crib.

The object of this invention is to provide a motorized baby crib which is very comfortable and which could easily induce a baby to sleep due to its smooth and gentle movement.

It is also an object of this invention to provide a motorized baby crib the operating parts of which are very simple.

A better understanding of the above objects, as well as, the novel features and advantages of the subject motorized baby crib could be had by reading this specification together with the accompanying drawings, forming part of this specification wherein:

FIG. 1 is a longitudinal side elevational view of the motorized baby crib in accordance with this invention.

FIG. 2 is a fragmentary cross-sectioned view taken generally along line II—II of FIG. 1.

FIG. 3 is an enlarged fragmentary view showing the details of the wheel mounting.

FIG. 4 is a cross-sectional view taken along line IV—IV of FIG. 3.

Referring to the drawings, particularly FIG. 1, this motorized baby crib as shown has a movable crib proper 1 of conventional construction. The crib proper has four corner posts 2, two at each of the transverse ends thereof.

At the bottom end 3 of each of the posts is bolted a flat bar 4 which extends substantially beyond the end of said post. At the bottom end 5 of the flat bar is welded a shaft 6 and on this shaft is rotatably mounted the wheel 7. SAid wheel is preferably a roller bearing wheel.

The wheels 7 at the same transverse end of the crib proper are mounted for lateral movement on the grooves 8 provided at the end portions of the transverse end members 9 of the crib base 10. The grooves serve as a guide for the wheels. Suitable removable covers 11 are provided for the grooves at the end portions of the transverse end members. The transverse end members are rigidly connected together by the longitudinal members 12. To assure smooth and noiseless rolling of the wheels, the grooves are lined with a rubber pad 13. If nylon or rubber wheels are used, however, such rubber pads may be dispensed with.

Extending downwardly from the middle part of the crib proper are the transversely aligned supports 14. To said supports are secured the outer ends 15 of the stretched opposed coil springs 16, the inner ends 17 of which are secured to one end of the push rod 18. The other end 19 of the push rod is connected to one end of the eccentric arm or crank 20 the other end of which is in turn keyed to the shaft of the gear motor 21. Preferably, the shaft speed of the gear motor is around 35 RPM.

The use of the coil springs assure the necessary soft and shockless motion of the crib. Said springs also serve as an overload protection for the motor when the crib is prevented from moving. The motor will continue to run normally even when the crib is not rocking. A control box 22 is provided.

For convenience a timer switch (not shown) is incorporated so that the motor may be run to a desired predetermined length of time, say from 15 minutes to one hour.

The motor if desired could be controlled manually or by remote control. Suitable manual thermal overload relay (not shown) is also provided to protect the motor and all electrical installations are in accordance with the National Electrical Code.

Various changes may be made in the above described embodiment of the invention by those skilled in the art without departing from the essence of the invention as defined in the appended claims.

We claim:

1. An automatic motorized baby crib comprising a crib proper having downwardly extending corner posts, two at each of the transverse ends thereof, a wheel rotatably mounted at the end of each of said post, a base member, said base member having opposed transverse end members each having grooves at the end portions thereof wherein wheels at the same transverse end of said crib proper are movably positioned for lateral movement, transversely aligned supports extending downwardly at the middle part of said crib proper, opposed stretched coil springs, the outer ends of which are secured to each of said supports, a push rod one end of which is connected to the inner ends of said coil springs, an eccentric arm connected to the other end of said push rod, and motor means for operating said eccentric arm.

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