

May 16, 1933.

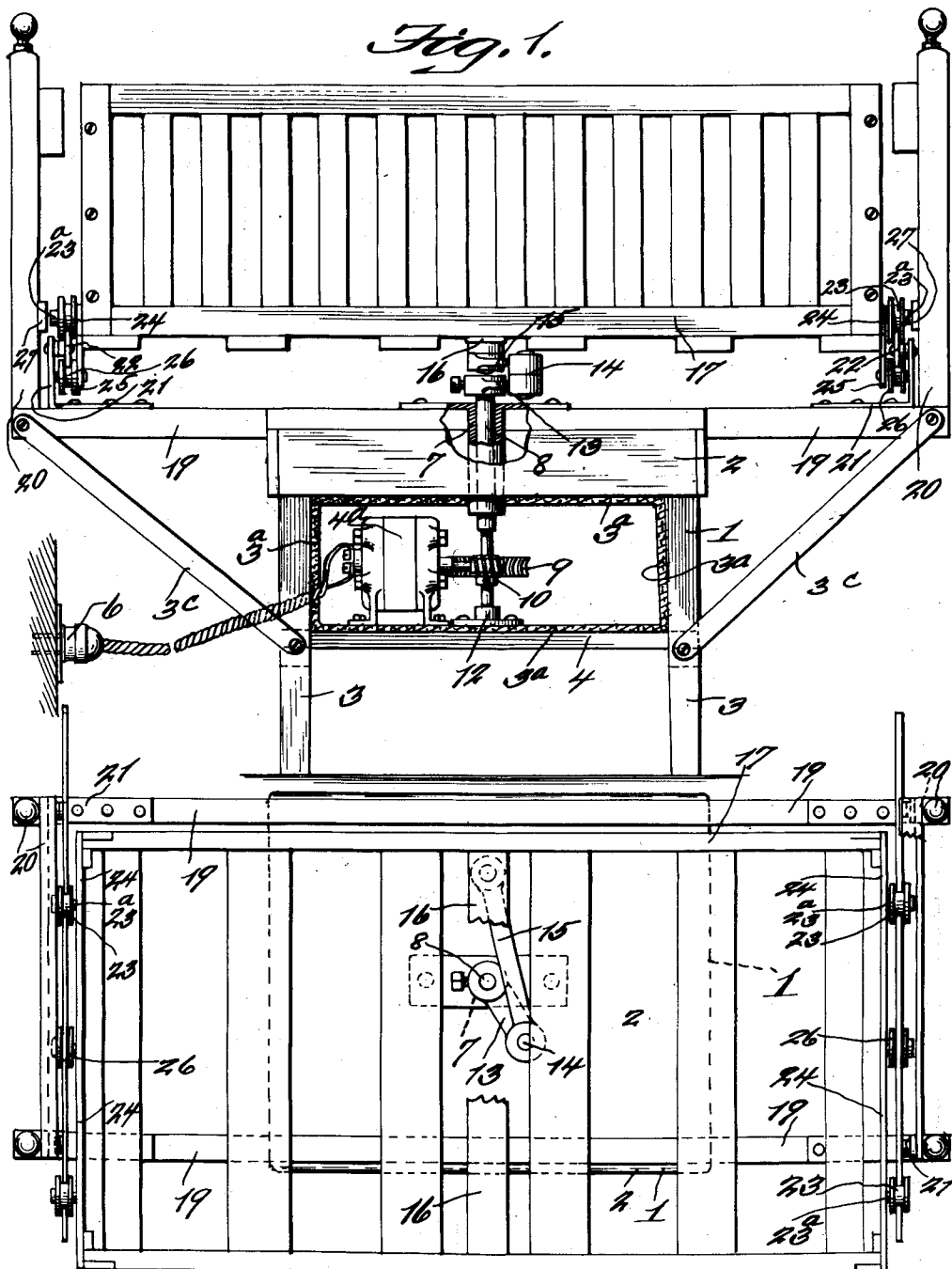
P. MARCHESE

1,909,204

RECIPROCATING CRADLE

Filed June 25, 1930

2 Sheets-Sheet 1



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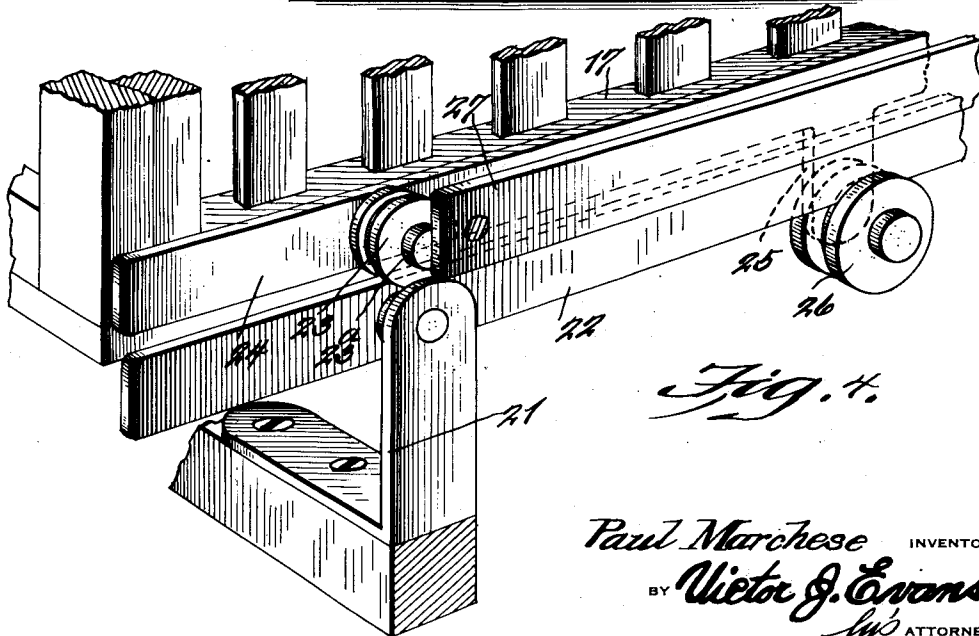
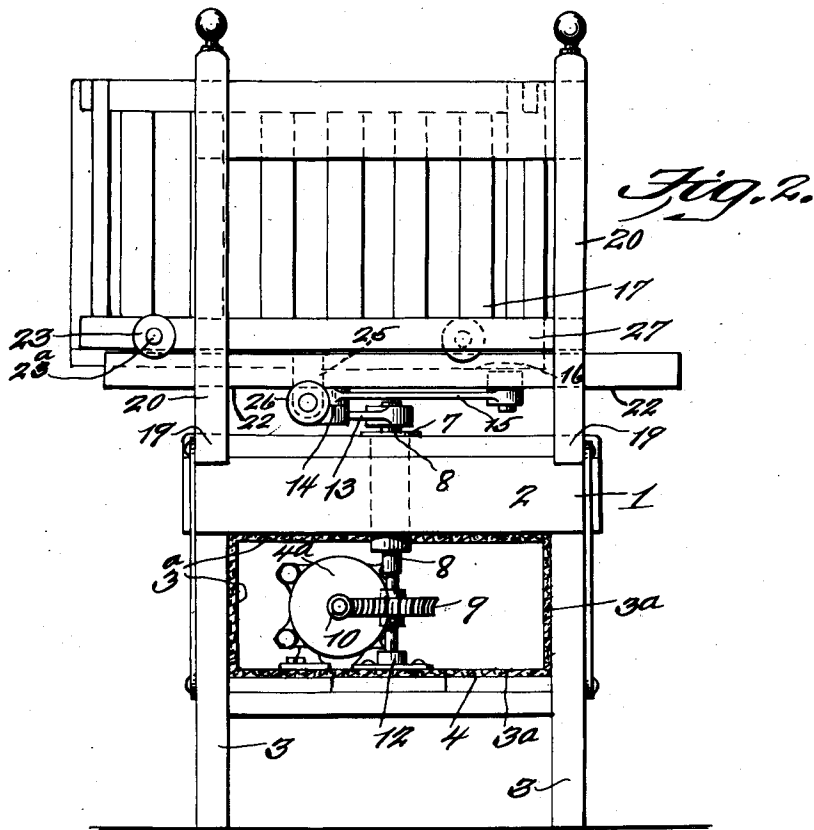
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RECIPROCATING CRADLE

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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RECIPROCATING CRADLE

Application filed June 25, 1930. Serial No. 462,742.

All cradles now in use require the mother or nurse to keep constantly rocking the cradle, in order to soothe the baby and cause it to fall off to sleep. This is an annoyance to which most mothers and nurse maids object.

It is the purpose of the present invention to avoid this annoyance, and to provide an improved slowly reciprocating cradle, the direction of movement being transversely of the frame, and as previously stated the movement being relatively slow, which will not excite the baby but in lieu thereof tend to soothe it to sleep.

Another purpose is to provide, in a cradle of this kind means consisting of a small motor carried by the base frame and operatively connected with the moving cradle section at a point through the top of the base frame in order to impart movement to the cradle proper.

Another purpose is to provide in a cradle, a base frame having end pieces with guides thereon including rollers on the cradle to engage the guides above and below their edges, together with guard rails, to not only prevent any binding of the rollers but also prevent any excessive endwise movement of the cradle, the guard rails engaging the spindles on which the rollers are mounted.

It is to be understood that the particulars herein given are in no way limitative, and that while still keeping within the scope of the invention, any desired modification of details and proportions may be made in the construction of the appliance according to circumstances.

The invention comprises further features and combination of parts to be hereinafter set forth, shown in the drawings and claimed.

In the drawings:—

Figure 1 is a view in side elevation of the improved cradle with its dominant supporting frame broken away at its center with the bearing 7 in section, and the padded housing portion 3a of the frame likewise in section.

Figure 2 is an end view of the same with the padding 3a in section.

Figure 3 is a plan view, clearly showing the means for imparting transverse reciprocating movements to the cradle.

Figure 4 is a perspective view of the guide tracks and the guard rails, showing how the cradle is mounted thereon.

Referring to the drawings, 1 identifies a base frame, which may be any size or any shape, which consists of an upper bed portion 2 with the depending legs 3, including a supporting shelf 4 on which a conventional type of motor 4a is supported, the motor having the usual wires or leads connected thereto, the other end of the lead having a conventional type of plug 6 for engagement in a socket (not shown) to transmit electric current to the motor.

Mounted in a sleeve bearing 7 of the top of the base frame is a shaft 8 provided with a worm wheel 9, which meshes with a worm 10 on the motor shaft. In this manner power is transmitted from the motor to the shaft 8, the lower end of which is mounted in a bearing 12 on the shelf. The upper end of the shaft 8 has a crank arm 13, connected at 14 to a link 15 which in turn is pivotally connected to a transverse bar 16 carried by the cradle 17.

Obviously when the shaft 8 is rotated through the medium of the worm and worm gear the crank arm on the shaft rotates and imparts movement to the link which in turn will transmit reciprocating movements to the cradle.

Due to the transmission of power from the motor to the shaft 8 through the medium of the worm gear and worm the movements of the cradle are relatively slow, having a soothing effect on the baby rather than causing any excitement thereof, the tendency being to put the baby to sleep.

The motor possibly may produce a humming noise when in operation though it may be well lubricated, and in order to deaden this noise to some extent the base frame may be closed in, that is from the shaft up, as shown, the interior of the enclosure of the base frame may be conventionally padded, at 3a acting to deaden the noise of the motor. However there will be

just enough of the noise escaping, such as will tend to soothe the baby and cause it to fall off to sleep.

The base frame is provided at its opposite portions with lateral extension arms 19, which support end pieces 20. The extension arms 19 and the legs 3 are connected by bars 3c.

Mounted on the arms 19 are brackets 21, and connecting the brackets are guide rails or tracks 22. Mounted on the opposite ends of the cradle upon spindles 23a are grooved rollers 23, metal bars 24 supporting the spindles. The grooved rollers 23 engage the upper edges of the guide rails, and depending from the bars (which carry the spindles) are arms 25, carrying grooved rollers 26 which ride on the underedges of the guide rails or tracks. By this arrangement of grooved rollers and guide rails or tracks the cradle is guided in its reciprocating movements and by means of the latter grooved rollers, the former grooved rollers 23 are prevented from disengaging the upper edges of the guide tracks or rails.

Secured to the adjacent faces of the end pieces of the base frame are guard bars 27, the longitudinal side faces of which assume relatively close positions to the spindles of the rollers 23, acting to prevent any binding of the rollers on the guide tracks as well as preventing undue endwise movement of the cradle.

The invention having been set forth, what is claimed is:

In a cradle as set forth, the combination with a dominant supporting frame having an upper bed portion with supporting legs and provided with a lower sound proof housing portion, said upper bed portion having extension arms extending laterally in opposite directions from the bed portion, of tracks with means operatively supporting the tracks on the extension arms transversely thereof, a cradle with upper and lower grooved rollers at its opposite ends for engagement with the upper and lower edges of the tracks, whereby the cradle may reciprocate laterally, a driven member mounted centrally of the upper bed portion of the frame, means operatively connecting the cradle and the upper end of the driven member, whereby as the member operates movement may be imparted to the cradle, means on the interior of the housing portion of the frame and connecting with the lower end of and imparting movement to the driven member, upstanding pieces rising from the ends of the extension arms, guard bars mounted upon the upstanding pieces with certain of their longitudinal side faces assuming relatively close positions to the pintles of the upper grooved rollers of the cradle, acting to prevent any binding of the

rollers as well as avoiding undue endwise movement of the cradle.

In testimony whereof he affixes his signature.

PAUL MARCHESE. 70

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