(No Model.)

# C. F. NILSON.

## COMBINED MOTOR CRADLE AND CHILD'S CARRIAGE.

No. 604,498. Patented May 24, 1898.

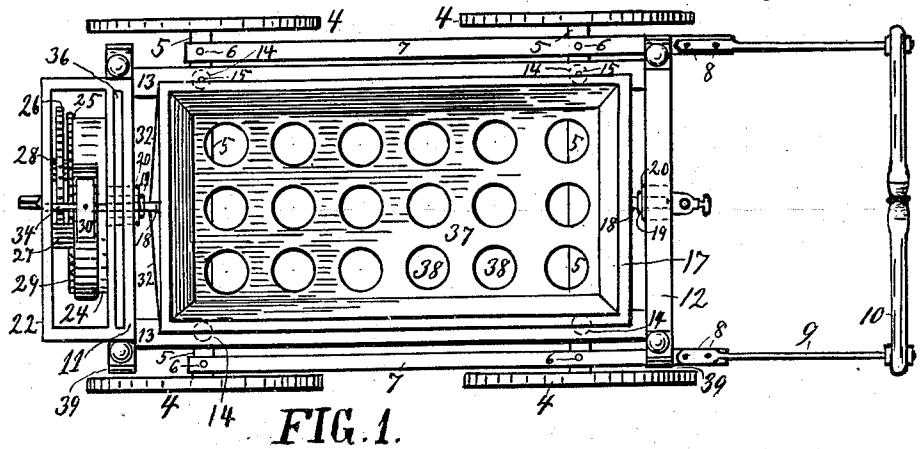


FIG. 1.

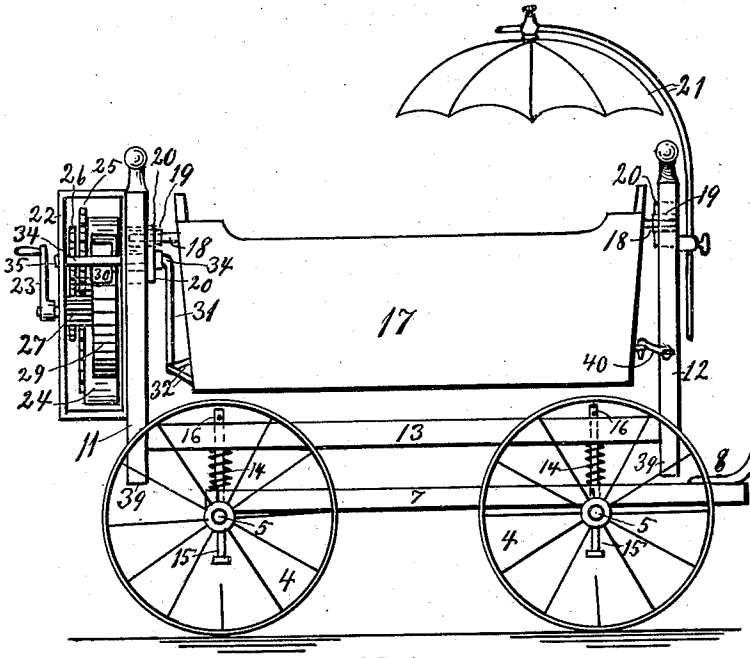


FIG. 2.

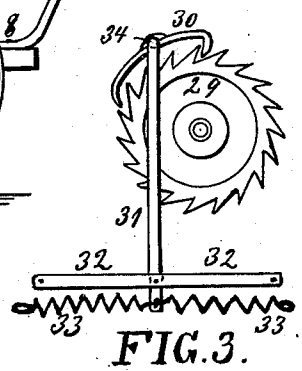


FIG. 3.

WITNESSES:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

CARL F. NILSON, OF GILES, WISCONSIN.

## COMBINED MOTOR-CRADLE AND CHILD'S CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 604,498, dated May 24, 1898.

Application filed March 12, 1897. Serial No. 627,145. (No model.)

*To all whom it may concern:*

Be it known that I, CARL F. NILSON, a citizen of the United States, residing at Giles, in the county of Iron and State of Wisconsin, have invented certain new and useful Improvements in Motor-Cradles and Buggies; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in cradles for children.

The objects of the invention are, first, to provide a combined cradle and baby-buggy which may readily be converted into a cradle only; second, to provide a motor-operated cradle in which the sound of the motor is reduced to a minimum and further deadened by insulating materials on its way to the ears of the child. I thus remove the long-known objection to cradles operated by a clock mechanism, that the noise or sound of the machine provokes the child and even injures its brain, especially when placed at the head end of the cradle, which heretofore has been the usual practice.

The above and other minor objects I attain by the novel construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a top or plan view of my improved cradle with the parasol and the top or cover of the motor-case removed. Fig. 2 is a side elevation of Fig. 1 with the side of the motor-case removed, but the top of it and the parasol shown. Fig. 3 is a detail view of the escape mechanism of the motor and its means of connection with the cradle.

Referring to the drawings by reference-numerals, 4 are four carrier-wheels revolving on the ends of the axles 5, which are bolted at 6 to the longitudinal bars or hounds 7, and thus make up a frame or skeleton truck to the rear end of which I secure at 8 the handle 9 10, by which the truck may be pushed like a regular baby-buggy. Upon this skeleton truck I mount the cradle-frame, which is made up of the end walls or uprights 11 and 12 and the two horizontal longitudinal frame-bars 13.

14 are four coil-springs interposed between the frame-bars 7 of the truck and the frame-bars 13, each with a bolt 15 extending through it and through the said bars.

16 are removable spring-pins put transversely through the upper ends of the bolts 15 to keep them from dropping out, as they are slidingly fitted in the woodwork to allow the springs to yield more or less.

17 is the cradle proper, which is suspended in the frame by having its rigidly-secured trunnions 18 journaled in the metallic boxes 19, secured in the rubber blocks 20, which are fixed one in each end wall of the cradle-frame and serve as insulators to deaden the sound of the motor on its way to the cradle proper.

The head end of the cradle-frame I provide with the parasol 21, and at the foot end of the frame I provide the motor-case 22, in which is mounted a spring-motor of the clockwork type. In said motor 23 is the hand-crank for winding up the spring 24, by which is driven a speed-increasing train of gear wheels and pinions 25 26 27 28, as shown, and which terminates in the escapement-wheel 29, which is made very broad-faced and of hard rubber in order to reduce its ticking sound when touching the anchor 30, which it operates, and swings the pendulum-arm 31, which is connected with the cradle 17 by the elastic cords 32 or by spring connecting-rods 33, which are shown in Fig. 3 as a modification. Either of said means of connection should be secured with their outer ends near the corners of the adjacent end of the cradle-body 17 about as shown.

The rock-shaft 34 of the escapement mechanism is journaled in metallic tubes or journal-boxes inserted in the rubber blocks 20 and 35. Secured in the end walls of the motor frame or case 36 is an idle air-space provided in the wall 11, or it may be considered as a space between the wall of the motor-case and the end wall of the cradle-frame. Its object is to hinder the transmission of sound of the motor toward the child through the air, while the rubber wheel 29 reduces the very cause of the sound, and the various rubber bearings or blocks around all journal-boxes lead-

ing to the cradle-body and the flexible connection between the pendulum and the cradle prevent the transmission of the sound through the various hard materials, some of which, if coming in direct contact with each other, would not only conduct but even increase the sound.

The bottom 37 of the cradle may preferably be provided with ventilating-holes, as 38, when the cradle is to be used in a warm climate.

The use of the parasol 21 may not be new on a baby-buggy, but its combination with a cradle, and especially with the end of a motor-cradle opposite to the end where the motor is located, I believe, is new and for obvious reasons important in this case.

40 is a stopping-hook to prevent the cradle from swinging when so desired.

In using the cradle in the house, especially in the winter-time, the spring-pins 16 may be removed and the cradle lifted off the bolts 15 and set on its four legs 39 on the floor; but when going out visiting or to picnics or other out-door rides the cradle should be mounted on the truck or lower frame, as shown, and will then perform the double function of both cradle and baby-buggy, which is so very desirable on such occasions that my invention may well be said to supply a want of long standing and will be a blessing to mothers, nurses, and other persons who have heretofore upon such occasions lost all pleasure of the picnic, visit, &c., by having to either carry the child in their arms or drive it about in the buggy, if the latter is at hand; but usually it is left at home, because the service it affords when it cannot be used as a cradle will seldom pay for the trouble of bringing it back and forth.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with a wheeled skeleton truck having the handle 9 10 of a frame detachably supported on springs upon the truck; a cradle suspended within the frame and being adapted to rock in the frame whether the latter is on the truck or not, substantially as and for the purpose set forth.

2. The combination with a wheeled truck having handhold for pushing it by, of a cradle suspended and rocking or swinging in a frame having legs adapted to stand on the floor and a motor secured to said frame for swinging the cradle and means for yieldingly and detachably supporting said motor cradle and frame upon the truck, substantially as and for the purpose set forth.

3. In a cradle, the combination of a frame and a cradle supported on trunnions to rock or swing therein, of a clockwork-motor secured to one end of the frame and operatively connected with the cradle and a parasol secured to the opposite end of the cradle over the head of the child, substantially as and for the purpose set forth.

4. In a cradle, the combination with a supporting-frame of a cradle swinging therein on trunnions or journals, a motor secured to one end of the frame and operating the cradle, said motor having the escapement-wheel 29, and the anchor 30, rock-shaft 34, and pendulum-arm 31, and flexible connection between said arm and the cradle proper, substantially as and for the purpose set forth.

5. In a cradle, the combination with a supporting-frame, of a cradle swinging therein on trunnions or journals, a motor secured to one end of the frame and operating the cradle, said motor having the escapement-wheel 29, and the anchor 30, rock-shaft 34, and pendulum-arm 31, and flexible connection between said arm and the cradle proper, said escapement-wheel being made of rubber or other sound-deadening materials, substantially as and for the purpose set forth.

6. In a cradle, the combination with a supporting-frame, of a cradle swinging therein on trunnions or journals, a motor secured to one end of the frame and operating the cradle, said motor having the escapement-wheel 29, and the anchor 30, rock-shaft 34, and pendulum-arm 31, and flexible connection between said arm and the cradle proper, said trunnions and rock-shaft having their journal-boxes inserted in rubber secured in the framework, substantially as and for the purpose set forth.

7. In a cradle, the combination with a supporting-frame, of a cradle swinging therein on trunnions or journals, a motor secured to one end of the frame and operating the cradle, said motor having the escapement-wheel 29, and the anchor 30, rock-shaft 34, the pendulum-arm 31, and flexible connection between said arm and the cradle proper, said trunnions and rock-shaft having their journal-boxes inserted in rubber secured in the framework, and the case containing said motor being secured to the cradle-supporting frame with an intervening dead-air space, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CARL F. NILSON.

Witnesses:
A. M. GUSTAFSON,
A. C. LARSON.