

(No Model.)

W. DEWEY.
CHILD'S SWINGING CRADLE.

No. 522,783.

Patented July 10, 1894.

Fig. 4.

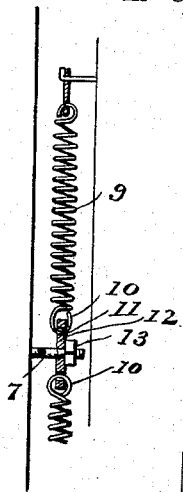


Fig. 1.

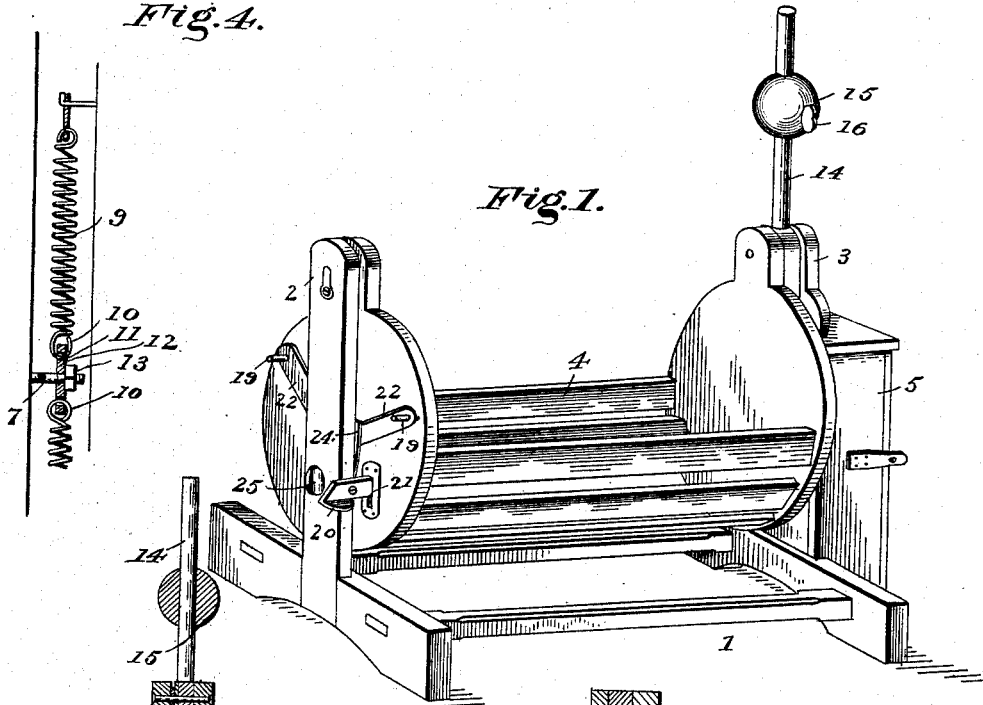


Fig. 2.

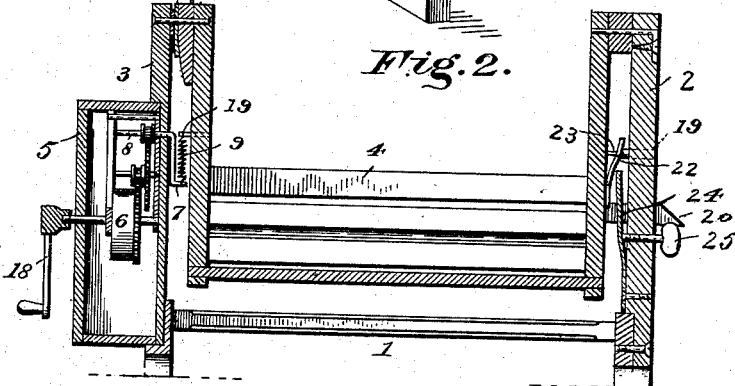
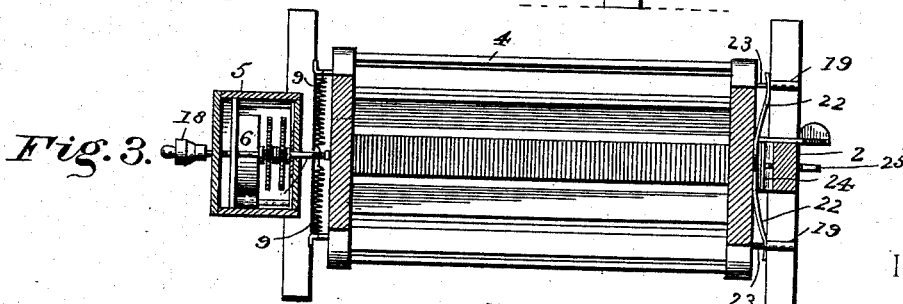


Fig. 3.



Inventor

Witnesses

Julius M. Kelley
J. P. Riley

By his Attorneys.

William Dewey,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

WILLIAM DEWEY, OF THORP, WISCONSIN.

CHILD'S SWINGING CRADLE.

SPECIFICATION forming part of Letters Patent No. 522,783, dated July 10, 1894.

Application filed February 21, 1894. Serial No. 501,040½. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DEWEY, a citizen of the United States, residing at Thorp, in the county of Clark and State of Wisconsin, have invented a new and useful Cradle-Motor, of which the following is a specification.

The invention relates to improvements in cradle motors.

The object of the present invention is to improve the construction of cradle motors, and to provide a simple and inexpensive one which will produce an easy rocking or oscillating motion, without sudden jerks and jars at the ends of the oscillations, and which will enable the rapidity of the oscillation to be readily adjusted.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a cradle motor constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a horizontal sectional view. Fig. 4 is a detail view illustrating the connection between the springs and the crank-arm.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the base of a stand provided at its ends with standards 2 and 3, and having suspended from and journaled between the upper ends of the standards an oscillating cradle 4.

A casing 5 is arranged adjacent to the standard 3, and has the latter forming a part of it; the casing contains a spring motor 6, having an exterior crank 7 of a drive-shaft 8.

The crank 7 is connected with opposite sides of the adjacent end of the cradle by a pair of extensible spiral springs 9, having their outer ends secured to the cradle, and their inner adjacent ends terminating in loops 10, which are linked into perforations 11 of a connecting piece 12, which is mounted on the crank 7.

The connecting piece 12 is secured on the crank arm by a nut 13 or the like; and the spiral springs take up any sudden or abrupt movement of the crank, and prevent the ef-

fects of the same being communicated to the cradle or its occupant.

In order to enable the oscillation of the cradle to be readily adjusted, it is provided with an upwardly extending arm or rod 14, on which is mounted an adjustable weight 15; the weight is preferably in the form of a ball having a vertical opening through it to receive the arm or rod 14; and it is secured at any desired adjustment by a clamping screw 16.

The casing is provided at its outer side with a door having a central opening, through which projects the winding shaft; the extended end of the shaft is threaded, and has detachably secured to it a crank handle 18; and the latter may be readily removed when it is desired to open the door of the casing. The cradle is provided at its rear end with opposite stops 19 located on opposite sides of the standard 2, to limit the swing of the cradle to prevent any liability of the occupant being thrown out. The cradle is held stationary when desired by a pivoted button 20 mounted on the standard 2 and arranged to engage a keeper 21, of the cradle.

The motion of the cradle gradually diminishes as the end of an oscillation is reached to prevent a sudden jerk being communicated to the cradle; and to assist in effecting this result opposite inclined springs 22 are mounted on the cradle adjacent to the standard 2. The inner ends of the springs which are flat are secured to the cradle, and their outer ends are provided with perforations, and are arranged on reduced portions 23 of the stops 19, the reducing of the stops 19 forming shoulders, against which the outer ends of the flat springs bear. As the cradle nears the end of an oscillation the flat spring is gradually compressed, and frictionally engages a wear plate 24 of the standard 2, and tends to retard the movement of the cradle.

The plate 24, which is adapted to co-operate with and be engaged by the springs 22 to produce the required friction to retard the motion of the cradle, is secured at its lower end to the inner face of the standard 2; its upper end is free; and it is forced away from the standard 2 to compress the springs to a greater or less extent and produce more or less friction by an adjusting screw 25. The adjusting screw 25 is mounted in a threaded

perforation of the standard, and is provided at its outer end with a head.

It will be seen that the cradle motor is simple and comparatively inexpensive in construction, that the motion is gentle and devoid of abruptness, that the rapidity of the oscillations may be readily adjusted, and that the cradle is gradually retarded at the end of an oscillation.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. The combination of a stand having standards, an oscillating cradle journaled between the standards and provided at one end with a vertically disposed arm and having an adjustable weight arranged on the arm, a motor arranged at one end of the cradle and connected therewith, opposite springs mounted on the other end of the cradle, an adjustable plate arranged on the stand adjacent to the springs and frictionally engaging the same, a keeper mounted on the cradle, and a pivoted button arranged on the stand for engaging the keeper, substantially as described.

2. The combination of a stand having standards, an oscillating cradle journaled between the standards, and the opposite out-

ward extending flat springs secured at their inner ends to the cradle and having their outer portions arranged to engage the stand, substantially as and for the purpose described.

3. The combination of a stand having standards, an oscillating cradle journaled between the standards, stops mounted on the cradle and arranged at opposite sides of the adjacent standard and provided with shoulders, and the oppositely disposed inclined flat springs secured at their inner ends to the cradle, and having their outer ends arranged on the stops and engaging the shoulder thereof, said springs being adapted to engage the adjacent standard, substantially as and for the purpose described.

4. The combination of a stand, a cradle journaled thereon, an adjustable plate mounted on the stand and arranged at one end of the cradle, and the oppositely disposed springs mounted on the cradle and arranged to be engaged frictionally by the adjustable plate, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM DEWEY.

Witnesses:

L. O. GARRISON,
C. B. GARRISON.