

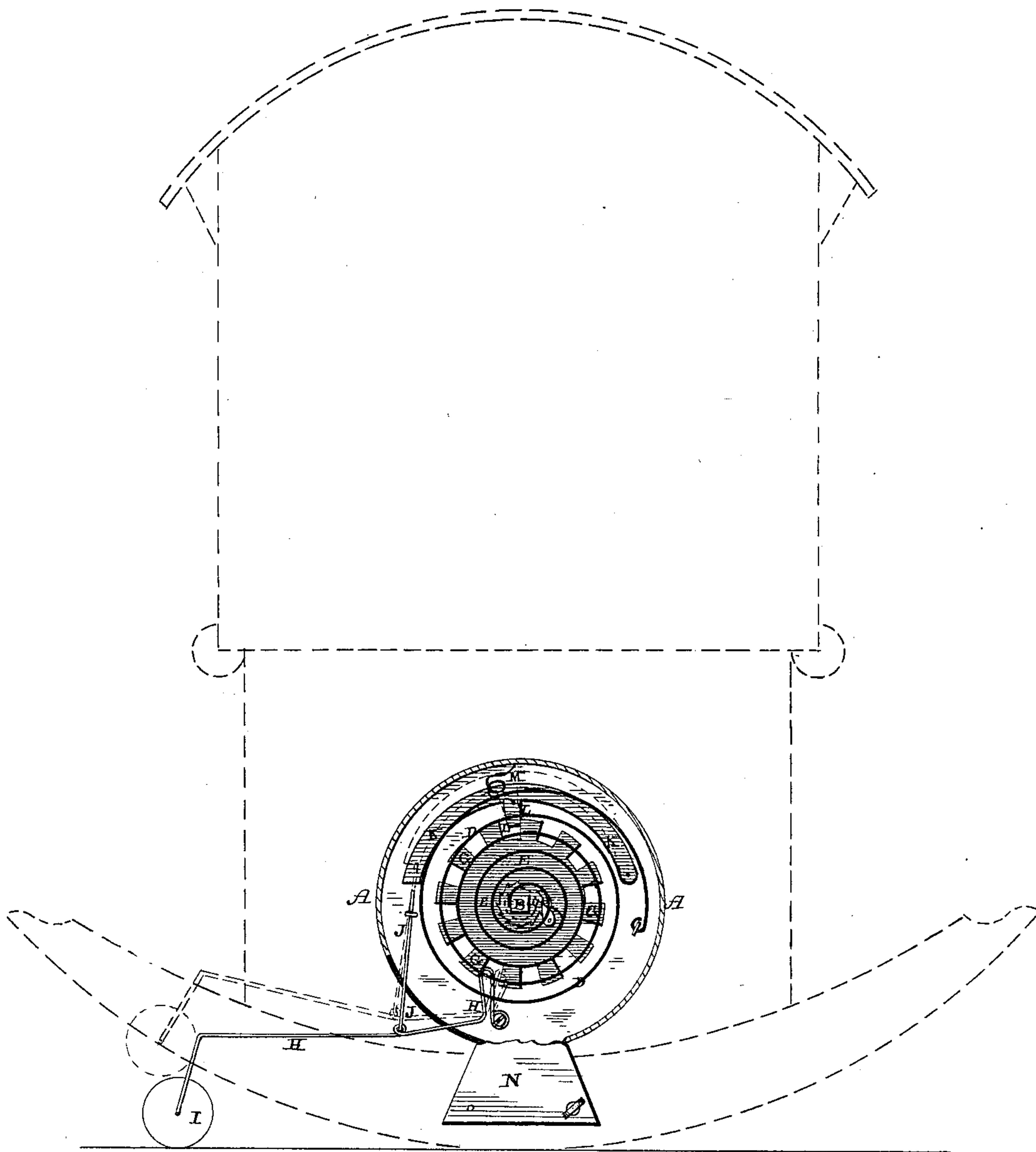
(No Model.)

T. J. MORRIS.

MOTOR FOR ROCKING CRADLES AND CHAIRS.

No. 362,850.

Patented May 10, 1887.



Witnesses

L. J. Gardner

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# UNITED STATES PATENT OFFICE.

THOMAS JEFFERSON MORRIS, OF KENOMA, MISSOURI.

## MOTOR FOR ROCKING CRADLES OR CHAIRS.

SPECIFICATION forming part of Letters Patent No. 362,850, dated May 10, 1887.

Application filed November 8, 1886. Serial No. 218,321. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS JEFFERSON MORRIS, of Kenoma, in the county of Barton and State of Missouri, have invented certain  
5 new and useful Improvements in Motors for Rocking Cradles or Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will  
10 enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to an improvement in motors for rocking cradles and chairs; and it  
15 consists in the combination of the inclosing-case, which is adapted to be secured to the rocker of a cradle or chair, the shaft journaled therein and carrying a ratchet-wheel, and an operating-wheel provided with radial teeth,  
20 and which is loosely placed upon the shaft, and having a pawl which engages the ratchet-wheel, with the spring-actuated stop or detent, which is made to intermittently engage the radial teeth of the operating-wheel, and a lever  
25 which is pivoted near its inner end to the inclosing-frame and adapted to be operated upon by the radial teeth of the operating-wheel and its outer end to rest upon the floor, a rod which is secured to the lever and adapted  
30 to raise the spring-actuated stop or detent and allow one of the radial teeth of the operating-wheel to pass, and a spring for rotating the shaft and operating-wheel, all of which will be more fully described hereinafter.

35 The object of my invention is to provide a device which can be readily and quickly secured to the rocker of a cradle or chair by means of set-screws, and which, when wound up, will impart a rocking movement to the  
40 cradle or chair to which it is applied.

The accompanying drawing represents a device embodying my invention applied to a cradle, the case being broken away.

45 A represents the inclosing-case, in which is journaled the shaft B, which has rigidly secured to it the ratchet-wheel C. A coiled spring, D, of any suitable length, has its inner end secured to the shaft and its opposite end to the case for the purpose of imparting  
50 a rotary motion to the shaft in the usual manner. Loosely placed upon the shaft is the operating-wheel E, which is provided with a

spring actuated pawl for engaging the ratchet-wheel, and thus made to revolve with the shaft. One end of the shaft is made to extend  
55 through the inclosing case for the purpose of having a key applied thereto and the spring wound up.

The operating-wheel E is provided with radial teeth G for the purpose of engaging the  
60 inner end of the lever H, and to cause it to turn upon its pivot. This lever H is pivoted near its inner end, and has its outer end extended outward a suitable distance and resting upon the floor, and provided with a friction-  
65 wheel, I, for the purpose of reducing friction. Secured to the lever is the rod J, which as the lever H is made to rock alternately raises the stop or detent K. This stop or detent is piv-  
70 oted at one end and extends partially around the inclosing-case immediately over the operating-wheel, and is provided with a downwardly-projecting tooth, L, for engaging the radial teeth of the operating-wheel. The spring  
75 M keeps the tooth L in engagement with the radial teeth of the operating-wheel and prevents it from revolving until the detent is raised by the upward movement of the rod J. The two sides of the inclosing-case have the projecting portions N for the purpose of ex-  
80 tending downward upon opposite sides of the rocker, and are then secured thereto by means of set-screws. Thus it will be seen that the device can be quickly and readily attached to  
85 and detached from the rocker of an ordinary cradle or chair.

The operation of my invention is as follows: The spring is wound up, which forces the operating-wheel around into the position shown, when it is stopped by the stop or detent K.  
90 In order to start the machine, it is only necessary, after the spring has been wound, to rock the cradle toward the lever, which rests upon the floor, causing it to turn upon its pivot, and the rod J to engage the detent K and push it  
95 upward, which disengages the detent from the teeth of the operating-wheel and allows the wheel to revolve, bringing one of the radial teeth in contact with the inner end of the lever H, which forces the outer end of the lever  
100 downward upon the floor and causes the cradle to tilt until the tooth which is engaging the lever passes its inner end and leaves it free to be forced back by the momentum of the



cradle. When in this position, the stop or detent again engages one of the teeth of the operating-wheel and holds it in this position, allowing the momentum of the cradle when  
5 rocking back to bring the lever back into the position shown in dotted lines, thereby pushing the rod J upward, disengaging the stop or detent, which again allows the wheel E to operate upon the inner end of the lever and force  
10 its outer end downward upon the floor, causing the cradle to again tilt, and this operation is repeated until the spring is unwound. The lever H is pivoted in such relation to the operating-wheel that it is held by the detent K.  
15 Its inner end will freely pass the tooth which has just operated upon it, and the momentum of the cradle will bring it in position to be operated by the next tooth.

I am aware that motors have heretofore  
20 been produced in which a lever is shown extending out from the operating mechanism,

and which bears upon the floor at its outer end and operates a pawl that engages with the operating-wheel, and this I disclaim.

Having thus described my invention, I 25 claim—

The combination of the outer inclosing-case, which is made to extend downward on opposite sides of the rocker and secured thereto by means of set-screws, the operating-wheel, the 30 lever H, the stop or detent K, and the rod J for operating the stop or detent, said lever being provided at its outer end with a wheel, and a spring for revolving the operating-wheel, substantially as shown and described. 35

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

THOMAS JEFFERSON MORRIS.

Witnesses:

G. W. HOLLIDAY,  
A. B. HAMILTON.