

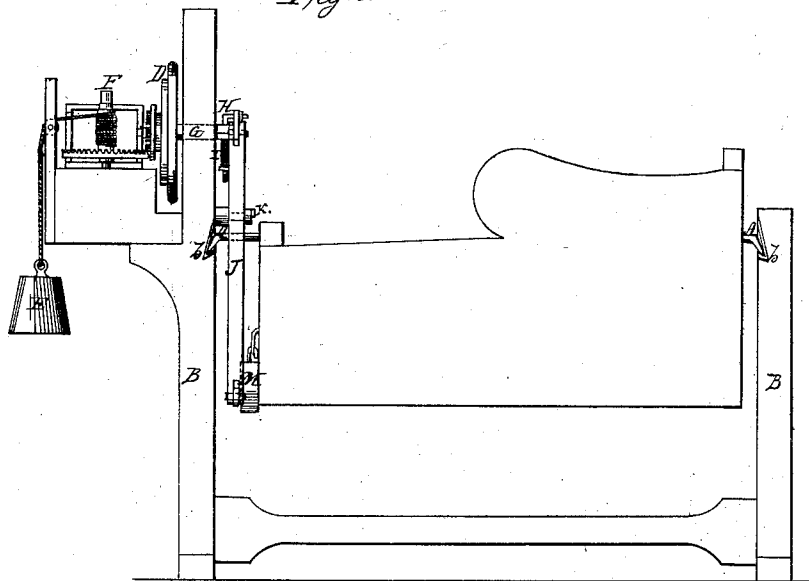
*L. F. Whitaker,*

*Cradle.*

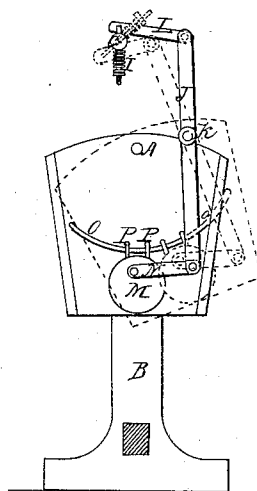
*N<sup>o</sup> 8,461.*

*Patented Oct. 2, 1851.*

*Fig. 1.*



*Fig. 2.*



# UNITED STATES PATENT OFFICE.

LUCIUS F. WHITAKER, OF RALEIGH, NORTH CAROLINA.

## SWINGING CRADLE.

Specification of Letters Patent No. 8,461, dated October 21, 1851.

*To all whom it may concern:*

Be it known that I, LUCIUS F. WHITAKER, of Raleigh, in the county of Wake and State of North Carolina, have invented a new and useful Improvement in Swing-Cradles; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making part of this specification.

Figure 1 is a front elevation. Fig. 2 is an end view showing the manner of attaching the motive power to the cradle.

This is called a self swinging cradle and is so constructed and arranged, that by the operation of geared work, (placed on the outside of one of the posts constituting the frame in which the cradle is suspended) actuated by a weight or spring, motion being communicated to the cradle by a crank connected with said geared work or combination of mechanical devices operating on a vertical lever and shackle bar attached to a shifting stub or pivot inserted into a ball or weight suspended by means of hooks or bent rods, from an arc, placed on one end of the cradle: said weight producing adhesion of the hooks or bent rods, without the pivot being actually united to the cradle, thus constituting it a movable pivot, and by this method of uniting, making it a matter of indifference as to the position or side of the cradle on which the child may lie: or it may roll from side to side without stopping the motion thereof: which would not be the case if the crank and fixed point alone were used.

This improvement differs from others in the accommodation produced by the shifting pivot, on the sliding ball adverted to, as I do not base my claim to novelty on the cradle constituting the pendulum with pallet and ratchet wheel, which would be inoperative upon the change of the child to the side of the cradle thus destroying that centrality of weight required in one constructed upon that principle, as the pendulum would cease to oscillate and relieve the ratchet wheel, on the child's rolling to the side, or changing its position from the center of the cradle.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my swing cradle of the ordinary form of swing cradles and suspend it

upon hooked points AA resting in V shaped notches *b.b.* inserted in the upright sides B.B. constituting the supports by which it may swing freely. The two uprights B.B. are connected below the cradle by a cross bar or rail C, thus forming the frame.

Upon the outside of one of the uprights B, is a mechanical device represented in Fig. 1 actuated by the weight E wound upon the arbor F, or a spring may be substituted, being wound upon the same arbor F, and which its action upon the pinion and shaft G, carrying the balance wheel D, and the crank H. Said crank admits of partial self adjustment by means of helical spring I confined between the side of the crank shaft and a nut on the end of the crank lever H said lever passing freely through the pinion shaft G allows the crank to be elongated by contraction of the helical spring I, thus preventing the sudden jerks attendant upon the change of movement, from right to left, consequent upon crank movements; this crank H operates by a crank rod L, upon a vertical lever J, vibrating on a center K placed upon the inside of the upright post B.: by means of the connecting rod N, motion is communicated to the suspended weight M.; this in its turn actuates cradle by the adhesion produced on the arc *o, o*, united to the end of the cradle as represented in Fig. 2: the weight or ball M (in which is inserted the pivot on which the connecting rod N is placed) is suspended from this arc *o o* by bent rods, or hooks P, P, the object of thus connecting by adhesion produced by this weight M, admitting of a sliding (instead of a fixed) attachment to the cradle, by which the action of the cradle is not arrested, on the child rolling or shifting its position to the sides of the cradle as represented in Fig. 2 by dotted lines. The importance of this is adverted to in the first part of this specification.

What I claim as my invention and desire to secure by Letters Patent is—

The self adjusting pivot or connection produced by the ball or weight M suspended from the arc *o. o.* by bent rods or hooks P. P. Said hooks having sufficient adhesion to communicate motion to the cradle from the motive power before described: thus constituting a sliding instead of a fixed pivot upon the end of the cradle, making it a mat-

ter of indifference on which side of the  
cradle the child may be lying, without stop-  
ping the motion of the cradle which with  
the crank alone would stop. The action of  
5 this cradle is so gentle and works so steadily  
as to be free from noise.

In testimony whereof I have hereunto

signed my name before two subscribing wit-  
nesses.

LUCIUS F. WHITAKER.

Witnesses:

ALEX. R. CAMPBELL,

M. F. ASBINE.