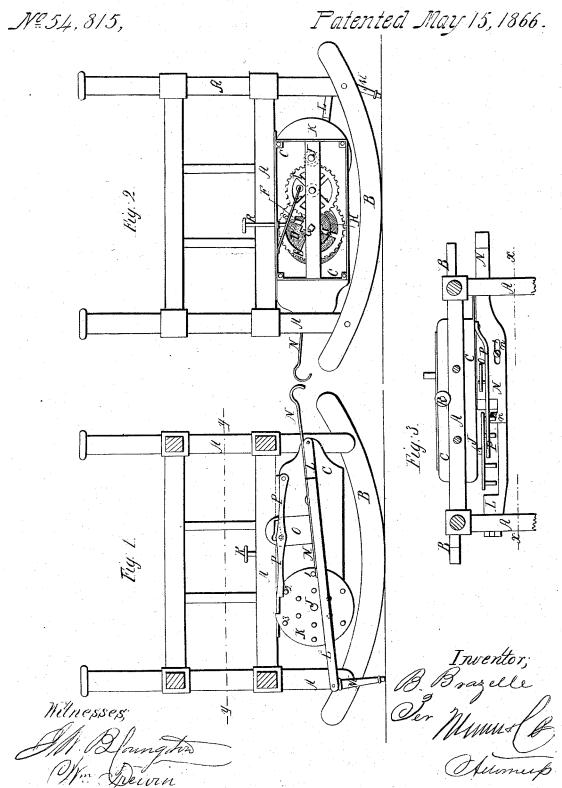
B. Brazelle,

Cradle,



UNITED STATES PATENT OFFICE.

BENJAMIN BRAZELLE, OF NASHVILLE, ILLINOIS, ASSIGNOR TO HIMSELF, H. P. WALKER, AND I. CLARK BROWN, OF SAME PLACE.

IMPROVED SELF-ROCKING CRADLE.

Specification forming part of Letters Patent No. 54,815, dated May 15, 1866.

To all whom it may concern:

Be it known that I, BENJAMIN BRAZELLE, of Nashville, in the county of Washington and State of Illinois, have invented a new and useful Improvement in Self-Rocking Cradles, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which-

Figure 1 is a vertical cross section of a cradle with my improvement attached, taken through the line x x, Fig. 3. Fig. 2 is an end view of the same, the cap or side of the case that contains the clock work being removed. Fig. 3 is a horizontal section of a portion of the same, taken through the line y y, Fig. 1.

Similar letters of reference indicate like

parts.

My invention has for its object to furnish an attachment for cradles, cribs, &c., which shall be self-rocking and adjustable, so that the motion may be long or short, and slow or fast, as may be desired; and it consists of the rocker-wheel, the sliding verge, the lever, the stud, and the hinged foot, in combination with each other, with the clock work, and with the frame of the cradle or crib, as hereinafter more fully described.

A is the frame, and B the rockers, of the cradle, about which there is nothing new.

C is a case attached securely to the frame of the cradle, and within which is placed the clock-work that gives motion to the cradle.

D is the mainspring, one end of which is secured to the side of the case and the other end to the axle of the cog-wheel E. The cog-wheel E is made to revolve with its axle by the pawl F and ratchet-wheel G, said pawl being held down in its place by the spring H. The cog-wheel E meshes into pinions on the axle of the cog-wheel I, and imparts motion to said wheel, which in turn meshes into pinions on the axle J and communicates motion to said axle. The axle J projects through the inner side of the case C, and to its end is attached the rocker-wheel K. The outer face of this wheel is provided with projecting teeth or pins, upon each of which is placed a small friction-

two circles, the outer circles being near the circumference of the wheel and the inner about half-way between the outer circle and the center of the wheel, as shown in Fig. 3.

To the frame of the cradle, or to the side of the case C, is pivoted one end of the lever L. The other end is connected to the foot M by a hinge joint, as shown in Figs. 1 and 3. This joint has enough play to allow the lever to make its movements in rocking the cradle, but not enough to allow the foot M ever to get out of its proper relative position.

N is a sliding verge attached to the upper side of the lever L, to which it is secured by a screw passing through a slot, n', in said sliding verge N. The lower end of the verge N is cut away, as shown, leaving a projecting part, n2, which comes in contact with either the outer or inner row of teeth on the wheel K, according as the said verge is drawn up or pushed down. To the edge of the sliding

verge N is attached a stud, O, having a slot made in its upper end, in the form shown in To the frame of the cradle, or to the side of

the case C, is pivoted one end of a detent or lock-lever, P, the other end of which is made in the form represented in Fig. 1. To the side of the lever P is attached a pin which enters the slot in the stud O, as shown in Figs. 1

and 3.

R is a set-screw passing down through a nut in the upper side of the case C, and its lower end rests upon a spring, S. One end of this spring is attached to the upper side of the case C, and its other end carries a friction roller, which, when the spring S is forced down by the screw R, comes in contact with the axle of the wheel I and retards the motion of the wheels.

In using the cradle, when it is in the position represented in Fig. 1 the force of the spring D presses the pin 1 down upon the part n^2 of the verge N. This raises the left-hand side of the cradle, giving it an impulse toward the right. This allows pin 1 to slip from the end of the verge N and brings pin 3 against the tooth of the lever P. On the return swing, or movement of the cradle toward the left, the stud O raises the lever P away from pin 3 and roller. These teeth or pins are arranged in allows pin 2 to come into contact with the end

of the verge N, which gives the cradle another impulse to the right, and so on. By pushing the verge N down so that the part n^2 may come in contact with the inner row or circle of pins on the rocker-wheel K, the movements of the cradle will be shorter and quicker; and by turning down the screw R, and thereby increasing the friction, the movements of the cradle are made slower and more gentle.

I claim as new and desire to secure by Let-

ters Patent—

The rocker-wheel K, the sliding verge N, the lever L, the detent or lock-lever P, the stud O, and the hinged foot M, in combination with each other, with the clock-work, and with the frame of the cradle or crib, substantially as herein described, and for the purpose set forth.

BENJAMIN BRAZELLE.

Witnesses:

HENRY T. SUMNER, JAMES M. MCELHANAN.