D. Walker,

Cradle,

No. 34,535, Patented Feb. 25, 1862.

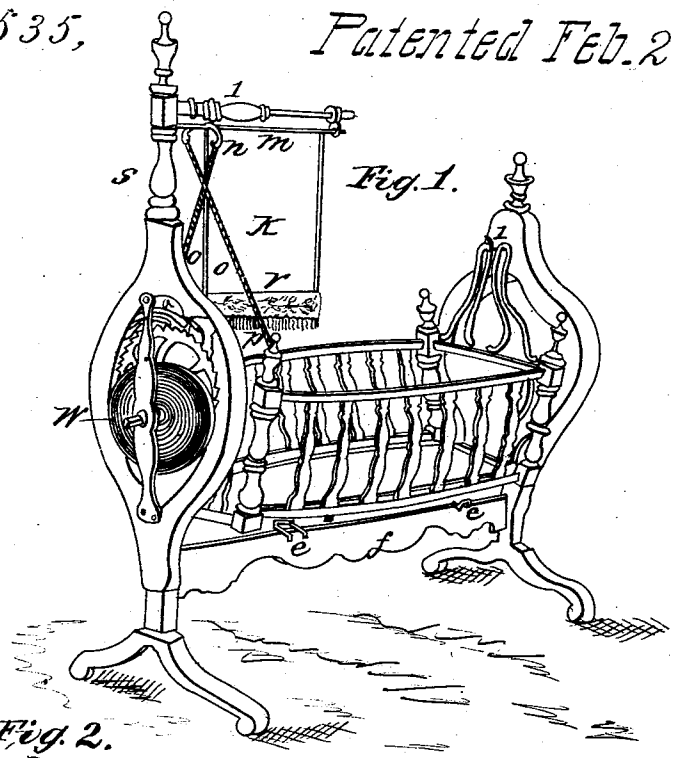


Fig. 1.

Fig. 2.

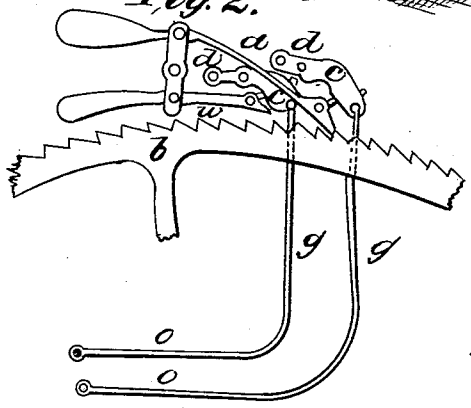


Fig. 3.

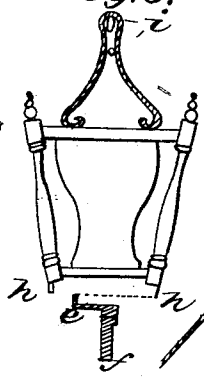
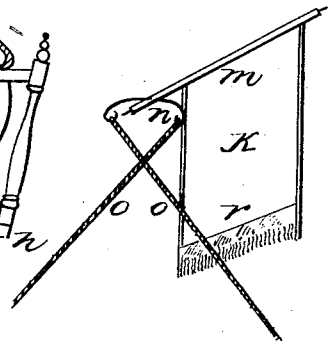


Fig. 4.



Witnesses.

W. M. Gooding

John P. Brooks

Inventor.

David Walker.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DAVID WALKER, OF NEWARK, NEW JERSEY.

IMPROVED SELF-ROCKING CRADLE.

Specification forming part of Letters Patent No. **34,535**, dated February 25, 1862.

To all whom it may concern:

Be it known that I, DAVID WALKER, of Newark, in the State of New Jersey, have invented certain new and useful Improvements in Self-Rocking Cradles; and I do hereby declare the following to be a correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved cradle complete. Fig. 2 is an elevation of part of the escapement-wheel with its pallets and relief-gages. Fig. 3 is a vertical transverse section through the stops, the end of the cradle being shown in elevation. Fig. 4 is a separate view of the fan or fly-brush.

The same part is marked by the same letter of reference in all the figures.

The nature of my invention consists in improvements in the mechanism for imparting motion to the cradle, in attaching a fan or fly-brush to it to be operated by the motion of the cradle, and in regulating the amount of motion by means of stops, all as hereinafter set forth and shown.

To enable others to make and use my improved cradle, I will proceed to describe its construction and operation.

The frame-work of the cradle may be of the form shown in Fig. 1, or of any other that may be found suitable. That part of the cradle which holds the bed is suspended in the frame from two pivots, so as to oscillate after the manner of a pendulum in obedience to an adequate impulse. This impulse is given by a clock-spring acting through an escapement in the same manner that a clock-pendulum is actuated. I have, however, made an improvement in the common clock-work to adapt it to the peculiar conditions of the function it has here to perform by providing the balanced pallets *a* with relief guides or gages *c*, which guide the pallets into the teeth of the escapement-wheel *b* when the pallets are moving in one direction and allow them to rise out of contact with those teeth when moving in the opposite direction. This device is an essential feature in my invention, as without it no cradle would operate a day without being broken, as the pallets would catch on the points of the teeth of the escapement-wheel as soon as the power of the spring became exhausted and the motion of the wheel slackened. The guides *c* are pivoted at *d* and adjusted by means of the rods *g g*, by which their free ends are supported and held in place. They control the movements of the pallets by means of pins projecting laterally from the latter and working in contact with the under surfaces of the guides, as seen in Fig. 2.

To the frame at the head of the cradle I attach a standard *s*, from which projects an arm *l* to support the fan. Under this arm is pivoted the rod *m*, from which project downward the side rods *k*, which support the fan or fly-brush *r*. At right angles to rod *m* is attached a cross-lever *n*, to the ends of which cords *o* are fastened, which, after being crossed, as shown in Figs. 1 and 4, are tied to the posts *p* at the upper corners of the cradle. By this arrangement the oscillation of the cradle imparts a corresponding motion to the fan.

Stops *h* and *e* on the cradle and frame, respectively, prevent the cradle from swinging too far for the comfort and safety of its occupant.

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

1. The construction and arrangement, substantially as described, of the relief-guides *c*, in combination with pallets *a* and escapement-wheel *b*, in the manner set forth and for the purpose specified, when used in a self-rocking cradle constructed as hereinbefore described.

2. In combination with a self-rocking cradle constructed as described, the stops *e* and *h*, constructed and arranged as and for the purpose described.

3. In combination with a self-rocking cradle constructed as described, the automatic fan *k n m r*, constructed and arranged as described and shown and operated by the movement of the cradle in the manner specified.

The above specification signed and witnessed this 5th day of February, A. D. 1862.

DAVID WALKER.

Witnesses:

WM. B. GROVER,

GEORGE S. WALKER.