J. McNEAL.

Swinging Cradle or Crib.

No. 198,405. Patented Dec. 18, 1877.

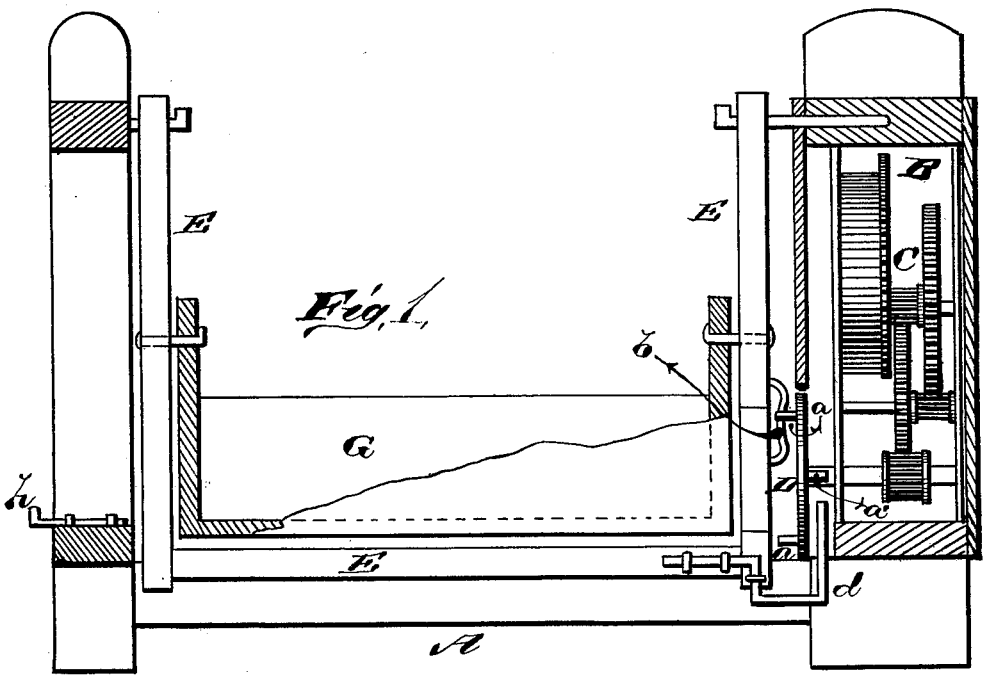

Fig. 1.

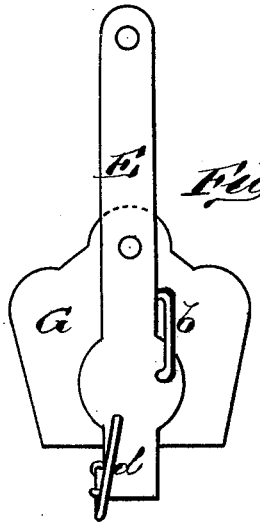

Fig. 2.

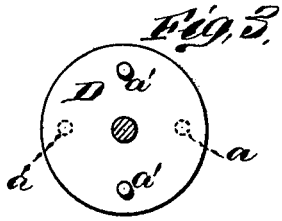

Fig. 3.

WITNESSES

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JAMES McNEAL, OF FLAT ROCK, ILLINOIS.

IMPROVEMENT IN SWINGING CRADLES OR CRIBS.

Specification forming part of Letters Patent No. **198,405**, dated December 18, 1877; application filed September 22, 1877.

To all whom it may concern:

Be it known that I, JAMES McNEAL, of Flat Rock, in the county of Crawford and State of Illinois, have invented a new and valuable Improvement in Swinging Cradles or Cribs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my swinging cradle or crib. Fig. 2 is a rear-end view, and Fig. 3 is a detail view, thereof.

The nature of my invention consists in the construction and arrangement of an automatic cradle, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

A represents a frame-work of any suitable construction, one end of which forms a box or casing, B, and in this box is an ordinary clock-work, C, operating a driving-wheel, D, at the lower end of the box or casing. Within the main frame A is hung a swinging frame, E, operated by the driving-wheel D, and within this swinging frame is hung a cradle, G, which thus swings back and forth independent of the swinging frame E. The driving-wheel D is provided with four pins, *a a* and *a' a'*, projecting alternately from the outer and inner sides of the wheel, at equal distances apart.

On the side of the frame E next to the driving-wheel D is inserted a staple, *b*, against which the outside pins or projections *a a* are to work, and on the side of the frame is fastened a rod, *d*, which is bent to project under the wheel and come up on the inner side thereof, for the inside pins or projections *a' a'* to work against.

It will be seen that one of the outer pins *a*, striking the staple *b*, turns the frame E to one side, and as soon as this pin clears the staple one of the inside pins *a'* strikes the rod *d*, and carries the frame back to the other side. The frame E thus obtains four distinct movements for each revolution of the driving-wheel, and each motion is positive.

The cradle being hung in and swinging independently of the swinging frame, the jar or shock of the driving-wheel is in a great measure removed from the cradle.

In one end of the main frame A is a sliding bolt, *h*, to be pushed inward for stopping the motion of the swinging frame E when desired.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a swinging frame operated by a clock-work, and a cradle hung in and swinging independently of said frame, substantially as set forth.

2. The combination of the swinging frame E, containing the swinging cradle G, and provided with the staple *b* and bent rod *d*, and the driving-wheel D, operated by a clock-work, and provided with the pins or projections *a a* and *a' a'*, arranged alternately on opposite sides, substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JAMES McNEAL.

Witnesses:
WILLIAM S. LYTLE,
JOHN C. REYNOLDS.