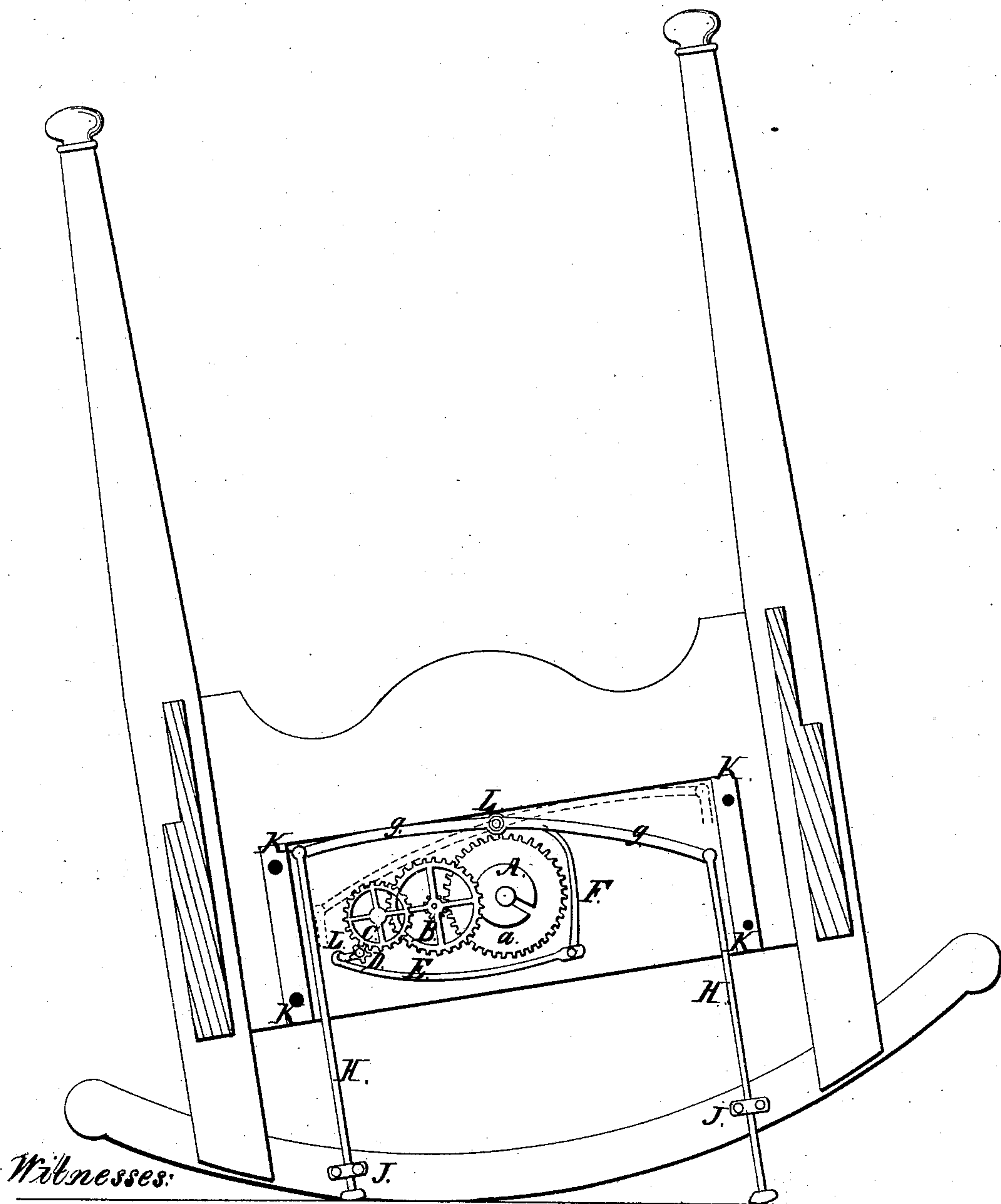


*C. H. Helmkamp,*

*Cradle,*

*N<sup>o</sup> 41,507.*

*Patented Feb. 9, 1864.*



*Witnesses:*

*Charles L. Fisher  
Geo H. Wright*

*Inventor:*

*C. H. Helm Kamp*

# UNITED STATES PATENT OFFICE.

C. H. HELMKAMP, OF READING, OHIO.

## IMPROVED SELF-ROCKING CRADLE.

Specification forming part of Letters Patent No. **41,507**, dated February 9, 1864.

*To all whom it may concern:*

Be it known that I, CHARLES H. HELMKAMP, of Reading, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Self-Rocking Cradles; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification.

The object of my invention is a construction of rocking mechanism for a cradle that shall be free from the abrupt movements and clicking sounds to which the customary self-rocking attachments are subject.

The accompanying drawing is a transverse section of a cradle provided with my self-rocking attachment.

A represents a box containing a mainspring similar to that of a clock, and which may be wound up in the same way, and may be connected by the customary ratchet or otherwise with a driving-wheel, *a*, which, through the medium of a series of multiplying gearing, B C D, imparts rotation to a crank, L, which is connected by pitman E with the arm F, which projects from the rocking beam G G'. Two rods, H H', pivoted to the ends of the beam G G', traverse guides J J' upon the inner face of the rocker, and by alternately pressing upon the floor impart the desired rocking motion to the cradle.

It is not intended in practice that the rods H H' shall leave the floor, but to insure against any striking or scratching action thereon the

rods may be shod with india-rubber or other soft substance.

It will be seen that there is a continuous contact of the driving and transmitting mechanism A *a* B C D E F G G' H H' entirely free from any escapement or disconnected movements such as prevail in devices of this kind, and which by its unpleasant clicking noise and abrupt movements act to frustrate the prime object of the machine. In my device an unbroken contact is preserved from the mainspring to the floor, and hence the rocking action takes place silently and without jar or abrupt movement of any sort.

I have selected to illustrate my invention a form which I have successfully tested in ordinary use, but do not desire to restrict the improvement to the precise arrangement shown so long as the end is reached by means substantially equivalent—for example, the rods H H' being omitted and the remaining portion of the mechanism being attached lower down and in an inverted position, the rocking action may be effected by the direct impact of the beam G G' upon the floor.

I claim herein as new and of my invention—

The combination of the spring-box A, gearing *a* B C D, crank L, pitman E, rocking beam G G', and rods H H', constructed, arranged, and operating substantially as and for the purposes set forth.

Witnesses: C. H. HELMKAMP.

S. BURKHALTER,  
ZONI TERHAAR.