

J. STONE.

Lever-Motors for Converting Motion.

No. 147,703.

Patented Feb. 17, 1874.

Fig. 1.

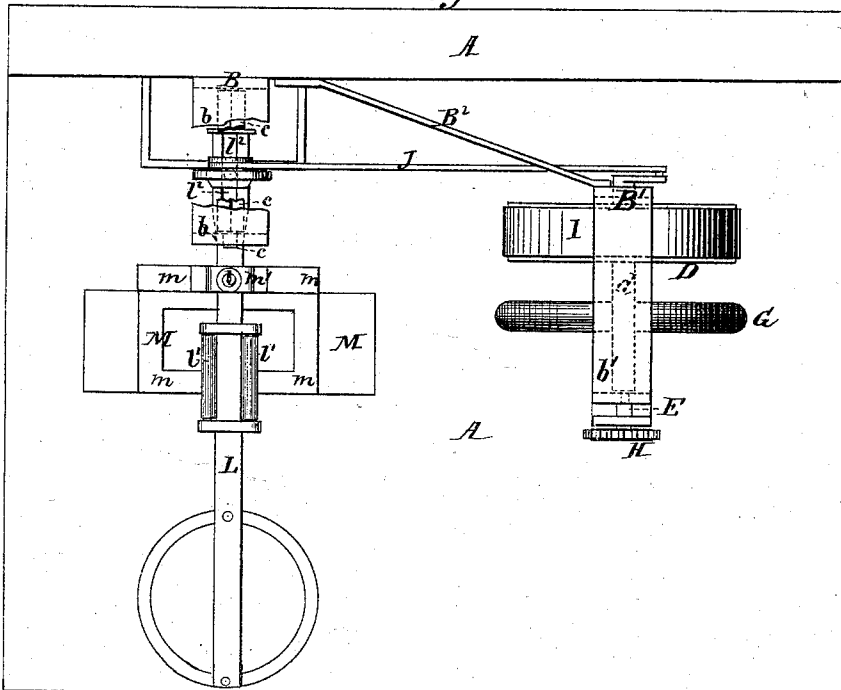
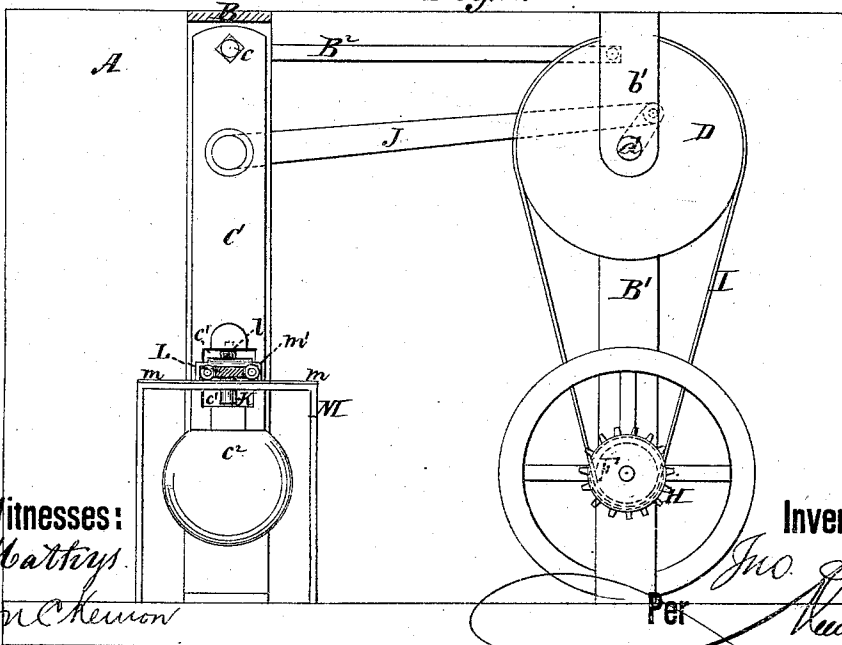


Fig. 2.



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JOHN STONE, OF MILL GROVE, MISSOURI.

IMPROVEMENT IN LEVER-MOTORS FOR CONVERTING MOTION.

Specification forming part of Letters Patent No. 147,703, dated February 17, 1874; application filed January 13, 1874.

To all whom it may concern:

Be it known that I, JOHN STONE, of Mill Grove, in the county of Mercer and State of Missouri, have invented a new and Improved Lever-Motor; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a top view. Fig. 2 is a side elevation.

The invention relates to imparting mechanical power to a drive-shaft through the pendulum movement; and consists in the mode of combining the pendulum with the crank-pitman and an actuating-lever, as hereinafter fully described, and pointed out in the claim.

A represents a right-angled frame, against which is secured the vertical plate B, having the overhang *b*. In the latter is journaled the shaft *c* of a pendulum, C, that is weighted, as usual, at the lower end. B¹ is a second upright frame, in whose overhang *b'* is journaled the shaft *d* of drive-pulley D, while the subjacent shaft E is also journaled in the lower part of said frame, and carries the small flanged pulley F, balance-wheel G, and drive-pinion H, the belt I serving to connect the pulleys D F, and enable the former to actuate the latter. B² is simply a brace to re-enforce and steady the frame B¹. J is the crank-pitman, which connects the pendulum with the crank-wheel,

and which is not connected, in the usual manner, with the rock-shaft *c*, but is attached between the center of motion or fulcrum of the pendulum C and the power, or point where the power is applied thereto, the purpose being to secure a convenient arc of vibration. K is a vertical anti-friction roll, located in a slot, *c'*, made just above the weight *c* of the pendulum. L is the actuating-lever or sweep, resting upon a supporting-bed, M, (which is preferably provided with a metallic plate, *m*,) pivoted on a vertical pin, *l*, under a keeper, *m'*, and having the anti-friction side rolls *l'* bear upon plate *m*. The bifurcations *l'* of front end receive between them the anti-friction-roll K, and move backward and forward thereupon. By this means, the leverage is greatly augmented, while the arc of vibration is brought within shorter and more convenient limits, the extra and horizontal lever L producing the first, and the mode of connecting the pitman evolving the second, effect.

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

The horizontal lever L, supported and pivoted upon a bed, M, in combination with the pendulum C, as and for the purpose described.

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Witnesses:

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