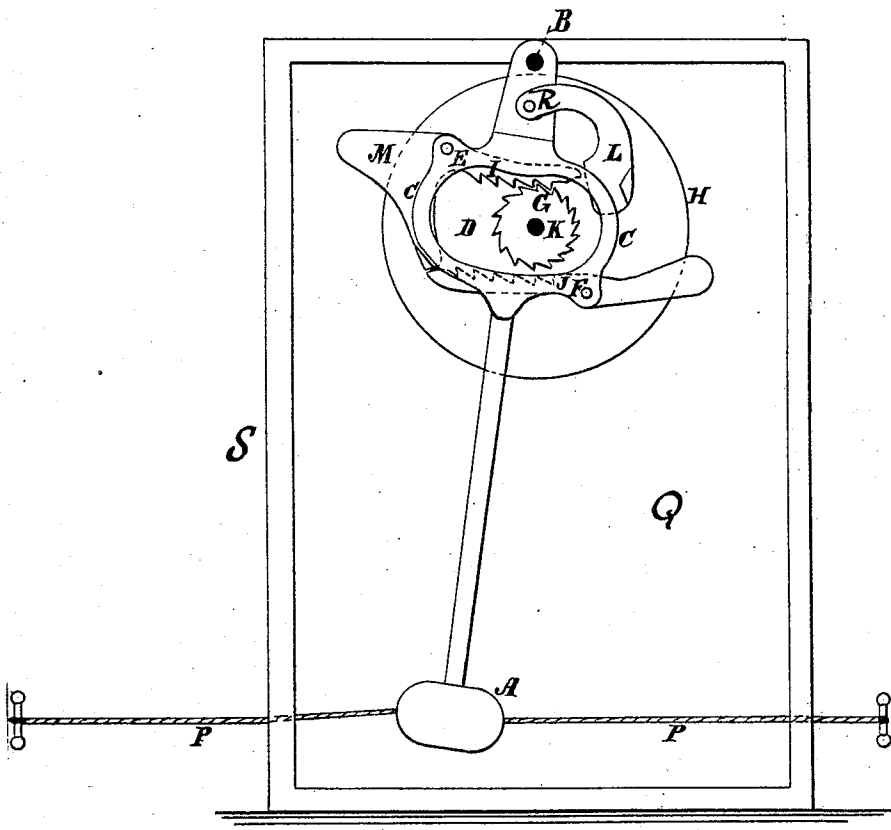


J. P. TAYLOR.

Devices for Converting Motion.

No. 145,599.

Patented Dec. 16, 1873.



Witnesses:

A Bennekenhoff.
Ridgwick

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Per

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UNITED STATES PATENT OFFICE.

JOSEPH P. TAYLOR, OF HUDSON CITY, NEW JERSEY.

IMPROVEMENT IN DEVICES FOR CONVERTING MOTION.

Specification forming part of Letters Patent No. **145,599**, dated December 16, 1873; application filed October 25, 1873.

To all whom it may concern:

Be it known that I, JOSEPH P. TAYLOR, of Hudson City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Motive Power, of which the following is a specification:

The object of this invention is to provide an improved apparatus for applying motive power for propelling machinery, and for other purposes; and it consists in a pendulum-lever connected with a rotating wheel, a continuous rotary motion being produced by means of a ratchet-wheel and two ratchet-pawls, the arrangement being as hereinafter set forth and described.

The accompanying drawing illustrates my invention.

Similar letters of reference indicate corresponding parts.

A is the pendulum-lever, which oscillates on the pivot B. The upper part of the pendulum-rod has a frame, C, with an oval-shaped opening, D. The edges of this frame C are slotted, so that the ratchet-pawls work in the slots, and they are pivoted to the frame at the points E and F. The ratchet-wheel G is also inclosed by the frame. H is the wheel, to which the ratchet is attached. This wheel is rotated by means of an upper ratchet-pawl, I, and a lower ratchet-pawl, J, which pawls are made to engage with the upper and the lower sides of the ratchet-wheel as the pendulum-lever oscillates. The wheel H has a central pivot or shaft, K, which keeps it to a central position as the pendulum-lever oscillates, the ends of the shaft being confined in suitable boxes at front and rear. The wheel and the ratchet are revolved on this central shaft, K. The pawls, it will be seen, are carried one to

the right and the other to the left, by the oscillation of the pendulum-lever, and alternately drop into gear with the ratchet by their own gravity and rotate the wheel. The pawls are thrown out of gear with the ratchet-wheel at the completion of each stroke by means of the weights L and M. The former is pivoted at the point R, and the latter at the point E. These weights operate upon the pawls by their own gravity, and detach them alternately from the ratchet at the completion of each of their respective strokes. An impulse is given the pendulum-lever by means of the cord P, which may be pulled in one or both directions. This cord may be attached at the bottom, as seen in the drawing, or to any part of the pendulum-lever rod, according to the speed required.

The apparatus is confined in a frame, Q, the sides S S of which are stops to limit the action of the pendulum-lever. The length of the pendulum-lever and the form and proportions of the operating parts may be varied in any manner, without departing from my invention.

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

An apparatus, composed of the pendulum-lever A, with the frame C, ratchet G, and rotating wheel H, pawls I and J, weights L and M, and cords P P, all combined to operate substantially as and for the purposes described.

JOSEPH P. TAYLOR.

Witnesses:

T. B. MOSHER.

ALEX. F. ROBERTS.