

United States Patent Office.

HARVEY FOWLER, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 107,475, dated September 20, 1870.

IMPROVEMENT IN MECHANICAL HAND-MOTORS.

The Schedule referred to in these Letters Patent and making part of the same.

I, HARVEY FOWLER, of the city of Washington, in the District of Columbia, have invented a certain new and improved Mechanical Hand-Motor, of which the following is a specification.

This invention consists in an arrangement of weighted levers or pendulums, connected with elastic suspensory cords, made from coil springs, with cord or rod running through the same, for the purpose of giving motion to machinery, or to the driving-wheels of a car or carriage.

In the accompanying drawing—

Figure 1 is a side view, showing the relative position of the standards, pendulums, springs, &c.

Figure 2 is an end view, showing the two pendulums, one on each side of the standard, position of springs, &c.

In the drawing—

A is an oscillating vertical standard, supported upon a pivot, *a*, at or near its center.

B is an auxiliary standard or arm, hinged or jointed to standard A, and bearing upon pivots *b b* near the top or outer extremity of the same, two pendulums, D D, one on either side thereof, or the pendulum may be supported upon the main standard A, if preferred.

Said arm B is supported and guarded by springs, E E, in such manner that it will sway away from its supporting standard A, and return at each swing and return of the pendulum by force of the gravity thereof.

From the weighted part of each of said pendulums an elastic cord, *c c*, made from coil springs, with a rod or rope running through the same, and also a sheath, if required, (see figure, *x*, in the drawing,) passes up to a point of support, *p*, above the pivot upon which said pendulums are supported.

These cords are designed for the purpose of hold-

ing said pendulums suspended or poised on either side of the said pivot or pivots upon which they swing.

Pivoted or jointed to the shanks or shafts of said pendulums, near their upper part, is a handle, F, extending horizontally, for the purpose of communicating, by the hand of an operator, a swinging motion to said pendulums; or said handle may be attached to the elastic cord, or to both, or it may have a claw for the purpose of grasping the suspensory cord, if desired.

Also, pivoted or hinged to said standard A, at its foot, is a shaft or pitman, G, extending to and connected with a crank, H, for the purpose of giving motion to machinery, or to the driving wheels of a car or carriage, and this shaft or pitman may be attached to standard A, above its pivot, if preferred, said pivot being, in such case, at the foot of said standard.

What I claim as my invention is—

1. The combination of weighted swinging levers or pendulums, the same being supported upon an oscillating standard or arm thereof, with elastic suspensory cords, substantially as and for the purpose described.

2. The elastic coil springs, or equivalent device, in combination with the pendulum, substantially as and for the purpose described.

3. The combination of the above-described pendulum with an auxiliary standard, hinged and supported upon coil or other springs, for the purpose of extending the reach of said pendulums, and of facilitating their alternating movement, substantially as described.

HARVEY FOWLER.

Witnesses:

N. DU BOIS,

J. W. MESTER.