

T. O. PERRY.  
MECHANICAL MOVEMENT.

No. 174,088.

Patented Feb. 29, 1876.

Fig. 1.

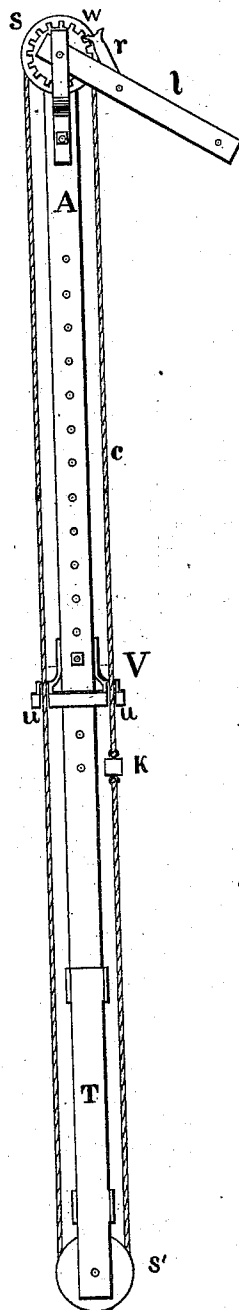


Fig. 2.

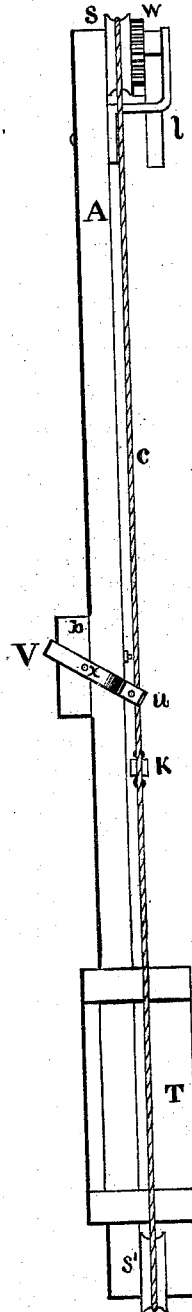
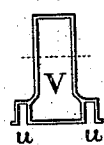


Fig. 3.



WITNESSES:

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INVENTOR:

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# UNITED STATES PATENT OFFICE.

THOMAS O. PERRY, OF TECUMSEH, ASSIGNOR OF ONE-HALF HIS RIGHT TO  
FRANKLIN W. DICKEY, OF MARSHALL, MICHIGAN.

## IMPROVEMENT IN MECHANICAL MOVEMENTS.

Specification forming part of Letters Patent No. 174,088, dated February 29, 1876; application filed  
November 13, 1875.

*To all whom it may concern:*

Be it known that I, THOMAS O. PERRY, of Tecumseh, in the county of Lenawee and State of Michigan, have invented certain Improvements in Mechanical Movements, of which the following is a specification:

The object of my invention is to obtain from a regular reciprocating or rotary motion a movement which shall be reciprocating at intervals, controllable in either direction.

In the drawing, Figure 1 is a front view of my device. Fig. 2 is a side elevation, and Fig. 3 is a plan of the piece V.

S and S' are ordinary sheaves. To S is attached a ratchet-wheel, W, both being loose on a pin supported at the upper end of the standard A. One end of the arm *l* is also loose on the pin, and to this arm is attached a ratchet, *r*, which works into the ratchet-wheel W. The sheave S' is attached to the piece T, which may slide up or down on the standard A, and acts as a weight to tighten the chain or cord C, which passes around the sheaves S and S'. To the standard A is bolted a block, *b*, through which passes a pin, *x*, on which the piece V turns. V has two grooves, *u u*, so placed that the cord C runs in them on both sides. A knob, K, is attached to the cord C.

Now, if a regular reciprocating movement be given to the arm *l*, the sheave S is made to rotate in one direction, imparting its motion

to the cord C, and when the knob K goes up on one side, it turns the piece V in one direction, slips by, and when it comes down on the other side the piece V is turned back again. Thus a reciprocating movement is imparted to V at intervals, which may be varied in duration by shortening or lengthening the chain or cord C.

If the piece V is placed midway between the sheaves S and S', it will turn with equal intervals in either direction; but if V is placed nearer to one sheave than to the other, the intervals will be unequal.

Without using a ratchet, rotary motion may be directly imparted to the sheave S with the same result.

I claim as my invention—

1. The reciprocating piece V, constructed as shown and described, in combination with the sheaves S S', cord C, and knob K, as and for the purpose herein set forth.

2. The piece V, in combination with the reciprocating arm *l*, ratchet *r*, ratchet-wheel W, sheaves S S', cord C, and knob K, to operate substantially as and for the purpose shown and described.

THOMAS O. PERRY.

Witnesses:

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