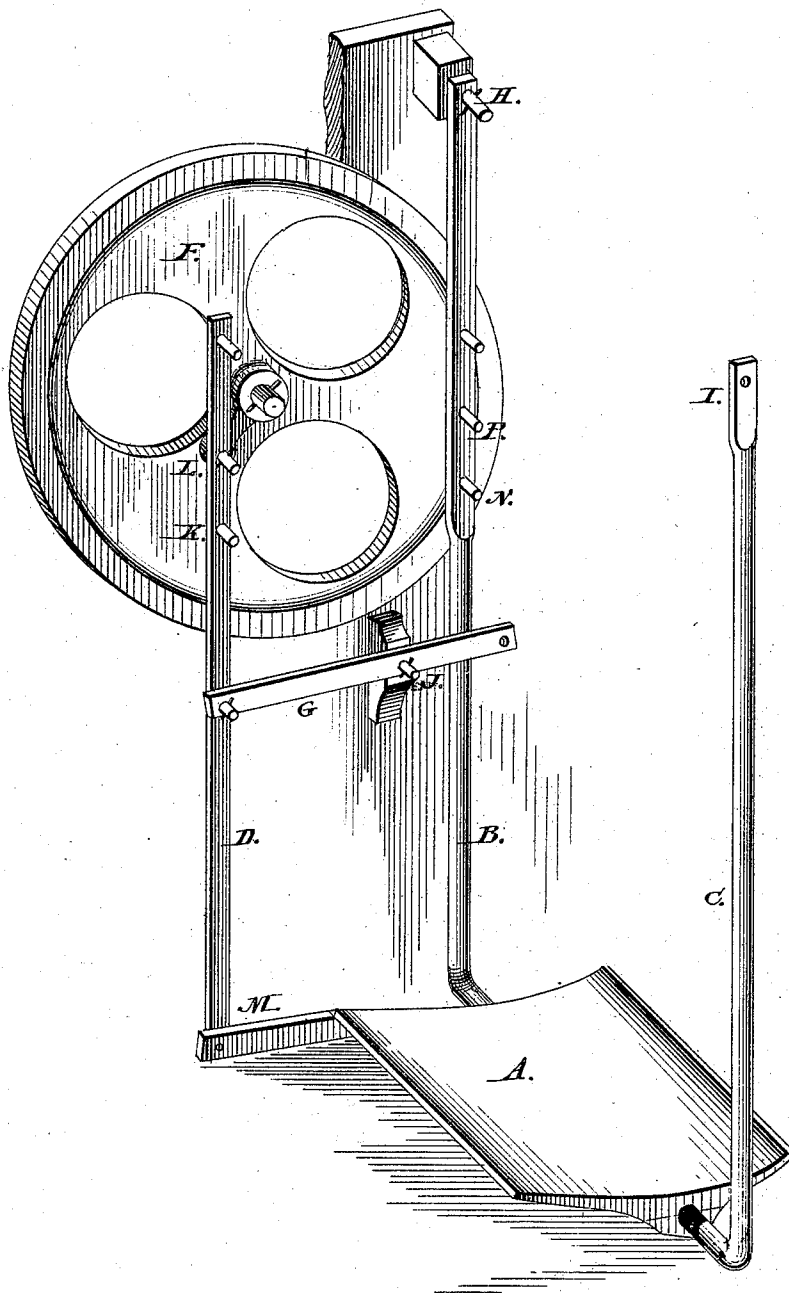


S. W. ROBINSON.

TREADLE.

No. 174,092.

Patented Feb. 29, 1876.



Witnesses:

Wm B. Clark
Chas H. Cummings

Inventor:

Stillman W. Robinson,
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Attorney.

UNITED STATES PATENT OFFICE.

STILLMAN W. ROBINSON, OF CHAMPAIGN, ILLINOIS.

IMPROVEMENT IN TREADLES.

Specification forming part of Letters Patent No. **174,092**, dated February 29, 1876; application filed November 18, 1875.

To all whom it may concern:

Be it known that I, STILLMAN W. ROBINSON, of Champaign city, Champaign county, Illinois, have invented certain Improvements in Treadles, of which the following is a specification:

The object of my invention is to produce a treadle movement which is free from dead-points by a proper mode of suspending the pedal, and connecting it to the crank or cranks of the fly-wheel shaft; also, to increase the range of movement of the foot, and make the application of power continuous.

The accompanying drawing represents a treadle embodying my invention.

A is the pedal, mounted upon the U shaped piece B C, so as to oscillate freely upon the horizontal post. The U is suspended at pivots H and I to the frame-work of the machine. D is a pitman connecting the crank-pin L with a projection, M, from A. At some point upon the pitman D, which may be below or above L, a link, G, is attached, and pivoted to the stationary pin J. This arrangement causes the toe or heel of the foot, when moving with

A, to describe a sort of an elliptical arc, in which there are no points of reversal of motion, and consequently no dead-points.

The arrangement above described is most convenient for giving such motion to F that the top moves toward the operator. When it is desired that the wheel move in the opposite direction, G may be removed and placed upon the pins K and N or L and P, H being, in this case, supposed to be above N or P. The object of thus providing for both directions of F is to have A move in such direction when inclined by M being raised or lowered that the foot must press toward A and not from it, and in this way not tend to slip off from A.

I claim as my invention—

The combination of the pedal A with the swinging piece B C, the pitman D, and the link G, substantially as described and set forth.

STILLMAN W. ROBINSON.

Witnesses:

J. R. TAYLOR,
S. C. KNIGHT.