J. F. HASKINS.

Device for Transmitting Power.

No. 201,178. Patented March 12, 1878.

Fig. 1.

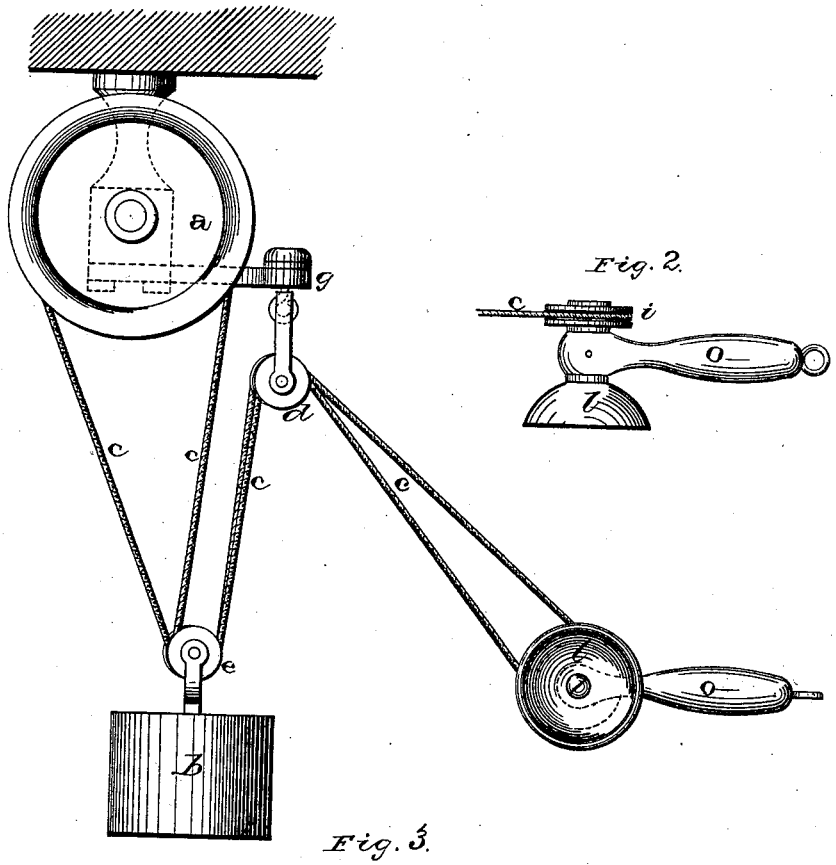
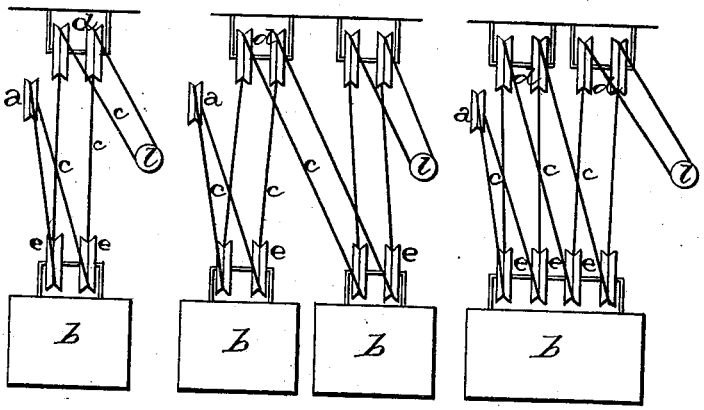


Fig. 2.

Fig. 3.



WITNESSES.

J. B. Garner.

William L. D. Haines.

INVENTOR

J. F. Haskins,

per

F. A. Lehmann,

Atty.

UNITED STATES PATENT OFFICE.

JOHN F. HASKINS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE STOW FLEXIBLE SHAFT COMPANY, (LIMITED,) OF SAME PLACE.

IMPROVEMENT IN DEVICES FOR TRANSMITTING POWER.

Specification forming part of Letters Patent No. **201,178**, dated March 12, 1878; application filed January 10, 1878.

To all whom it may concern:

Be it known that I, JOHN F. HASKINS, of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Machines for Transmitting Power; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in machines for transmitting power; and it consists in the combination of a driving-pulley, a weight or weights for stretching the driving cord or belt, swiveled pulleys, and a pulley on the tool that is being used, whereby the power may be freely transmitted to any part of the premises, as will be more fully described hereinafter.

The accompanying drawings represent my invention.

a represents a grooved pulley, which may be affixed to any driving-shaft in any part of the premises that convenience may dictate. Passing over the pulley, down toward the floor, is the driving belt or cord *c*, which cord passes under the two pulleys *e*, fastened upon the top of the weight *b*, and up over the two swiveled pulleys *d*, fastened to the under side of the arm *g*, or any other suitable support. From these two pulleys *d* the belt or cord passes outward over the pulley *i*, on one end of a shaft, to which is fastened any suitable tool, *l*.

It is readily apparent that when it is desired to operate the tool *l*, the pulley *a* being in motion, it is only necessary to catch hold of the handle *o* and move it outward sufficiently far to raise the weight *b*, when the driving belt or cord will be sufficiently tightened to transmit the motion of the pulley *a* to the tool. Just in proportion as the weight is raised upward the tool is moved outward twice the distance the weight is raised, and where a greater outward movement of the pulley *i* is desired, with a given distance for the rise and fall of weight *b*, it is accomplished by multiplying the number of weights *b* or number of pulleys *e* over increased weight. With two weights, *b*, and two sets of swivel-pulleys, *d*, an outward movement of four feet will necessitate a rise of but one foot for the weights *b*.

All and any number of pulleys found necessary to adapt the needed rise of weight *b* to any desired outward movement of pulley *i* may be placed in a single frame attached to weight *b*, in which case the amount of weight is increased in due proportion.

It will be seen that this increased weight may be put in single form, as shown in the drawings, in which case but half the pulleys *d* are necessarily swiveled.

Another great advantage of my invention is, that as the workman draws out the pulley *i*, he has the leverage on the weight *b*, as with tackle-blocks, and hence but little effort is required to hold and manage the tool.

I am aware that a driving-pulley, a driving-belt, a weight to hold the belt taut, and a swiveled pulley, when so arranged that the tool can be extended only as far as the weight is raised upward, are not new, and this I disclaim, these features being shown in the patent to Thorne, March 28, 1871.

I am also aware that two shafts, one of which is vertically adjustable, and over which the driving-belt passes, is also old.

My invention consists in extending the tool two or more times the distance the weight is raised, and taking the weight from the tool.

Having thus described my invention, I claim—

1. The combination of a driving pulley and cord or belt with a weight or weights provided with pulleys, and a swiveled pulley, whereby the pulley *i* may be extended outward a distance which is always a multiple of the rise of the weight or weights, substantially as specified.

2. The combination of the pulley *a*, weight or weights *b*, cord *c*, pulleys *e*, swiveled pulley *d*, and a pulley, *i*, on the tool, whereby the tool may be always extended two or more times as far as the weight or weights are raised, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of January, 1878.

JOHN F. HASKINS.

Witnesses:

WM. D. STONE,

DAVID HANLEY STONE.