C. L. JOHNSON.

Improvement in Powers for Small Machinery.

No. 115,864. Patented June 13, 1871.

Fig. 1.

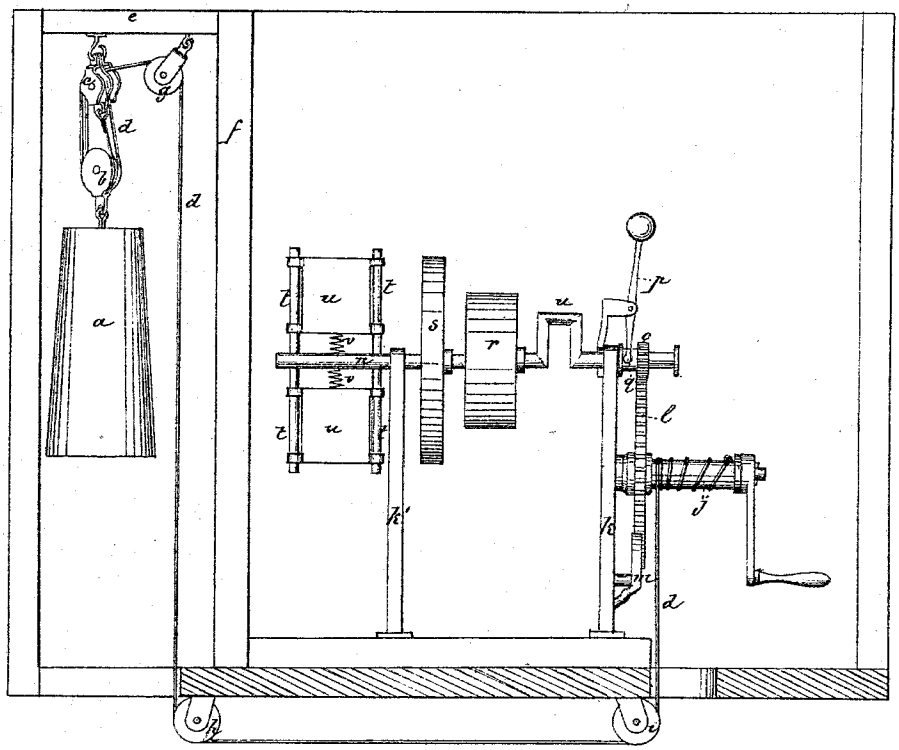
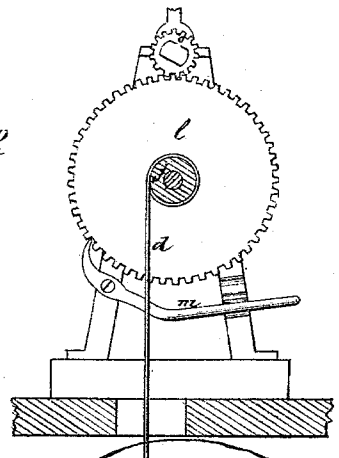


Fig. 2



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES L. JOHNSON, OF OMAHA, NEBRASKA.

IMPROVEMENT IN POWERS FOR SMALL MACHINERY.

Specification forming part of Letters Patent No. 115,864, dated June 13, 1871.

To all whom it may concern:

Be it known that I, CHARLES L. JOHNSON, of Omaha, in the county of Douglas and State of Nebraska, have invented a new and Improved Power for Small Machinery; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 is a detached side elevation of the wheel *l*.

This invention consists in an arrangement of parts whereby a weight hung outside of a building may be made use of for the purpose of operating a mechanism placed within the building, by which mechanism, when thus operated, any small machinery may be driven, through suitable connections.

Referring to the drawing, *a* is the weight aforesaid, the same being hung to a system of pulleys, *b c*, connected by a cord, *d*, and suspended to a projection, *e*, outside the building *f*. The cord *d* passes over a sheave, *g;* thence downward outside the wall to a sheave, *h*, beneath the corner of the edifice; thence beneath the floor to a sheave, *i;* and thence up through the floor to a horizontal shaft, *j*, inside the house, which shaft is mounted in a standard, *k*, and bears a cog-wheel, *l*. A weighted detent, *m*, is hung to the standard *k*, beneath, and so as to engage with the wheel *l*. The standard *k*, in conjunction with a fellow standard, *k'*, supports a horizontal shaft, *n*, which bears a sliding pinion, *o*, that, by means of a lever, *p*, may be thrown into gear with the wheel *l*, and be made to rotate the shaft *n* by means of a clutch, *q*. The shaft *n* bears a crank, *w*, a band-wheel, *r*, a fly-wheel, *s*, and a set of radial arms, *t*, with which are connected wings *u*, that slide in the arms *t*, being thrown outward by centrifugal force and drawn backward by counter-springs *v*, so as to operate as an automatic governor of the speed of the shaft *n*.

This apparatus can be employed to drive sewing-machines or any other small machinery.

The machinery driven is stopped by throwing the pinion *o* out of gear with the wheel *l*. The detent *m* stops the cog-wheel when required.

The weight *a*, being outside the house, is out of the way of the occupant, and may be boxed up, if desired.

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

The combination of a weight, *a*, when hung outside a building, by means of pulleys *b c g* and a cord, *d*, with the mechanism placed inside the building for driving small machinery, as specified.

C. L. JOHNSON.

Witnesses:

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