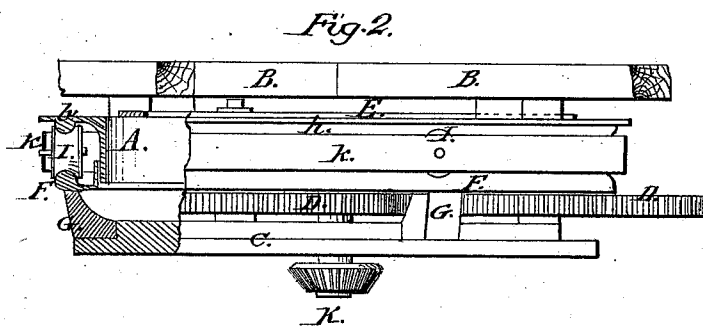
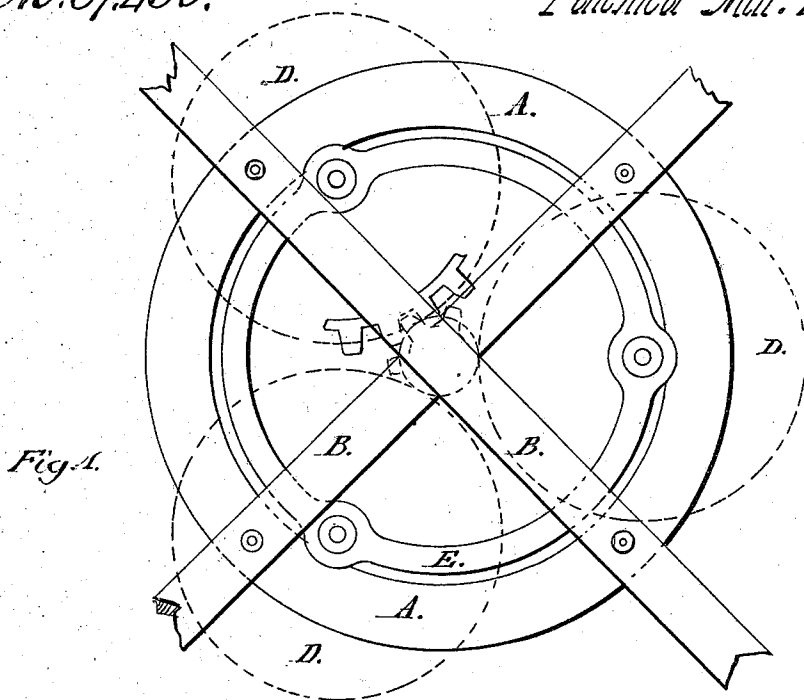


S. Wheeler,

Horse Power.

No. 87,450.

Patented Mar. 2. 1869.



Witnesses:
John A. Dyer
Phil. S. Lerner

Inventor:
Seth Wheeler
J. Fraser & Co.
attys.



SETH WHEELER, OF ALBANY, NEW YORK.

Letters Patent No. 87,450, dated March 2, 1869.

IMPROVEMENT IN HORSE-POWERS.

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

To all whom it may concern:

Be it known that I, SETH WHEELER, of the city and county of Albany, and State of New York, have invented a new and useful Improvement in Lever Horse-Powers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a horse-power having my improvement applied thereto.

Figure 2, a side elevation, a portion being shown in section.

Like letters refer to corresponding parts in both figures.

My invention consists in applying a series of independent anti-friction rollers, for supporting the master-wheel and levers, said rollers being entirely disconnected from the master-wheel and frame of the machine, and pivoted to a detached ring, which serves to maintain them in their proper positions, while they receive the weight of the wheel upon their exterior, and not upon their axles.

As represented in the drawings—

A is the master-wheel.

B B, the levers.

C, the frame in which the journals of the driving-gears D D D have their lower bearings.

E is the superior frame, furnishing the upper bearing for the same, while

K is a bevel driving-wheel on the central shaft, which is driven by the gears D D D.

I provide a circular track, F, of a diameter a little less than that of the periphery of the master-wheel, which is supported by stanchions, G, affixed to the frame C; and directly above, attached to the underside of the master-wheel, (being preferably cast on a portion of the same,) is an annular rib, h, corresponding with the track F.

The rollers I I are interposed between these two tracks, and may be of any number above two, suitable

to the diameter of the wheels, their faces being concave, to adapt them to the track and rib h.

A light ring, k, encircles the pulleys, and serves to keep them at suitable distances apart, they turning freely on a pin or pivot fixed in said ring.

The object of this improvement is to support the weight of the master-wheel and its necessary adjuncts, with as little friction as possible while revolving, which is effectually accomplished by this device.

I am aware that the master-wheel has been supported on rollers fixed to stanchions upon the frame, and such I do not claim, it not being new, and not accomplishing the same result which my improvement does, inasmuch as the great weight and strain brought upon the necessarily small journals of the pulleys, when fixed, soon causes them to wear out.

By my improvement, as the weight is supported wholly upon the exteriors of the pulleys, which have no journals, they are only subject to wear from friction upon the track, and act as simple rollers, being only held in position by the fixed pins of the ring k, which revolves as they roll.

They are thus rendered very durable, and support the wheel in a steady manner, reducing the draught by the amount of friction saved, and rendering it more uniform for the team.

I do not claim broadly supporting a master-wheel on rollers; but

What I claim as my invention, is—

The series of independent rollers I, connected together by the rotating band k, on the outside thereof, in combination with the master-wheel and the track F, substantially as and for the purpose described.

In witness whereof, I have hereunto signed my name, in the presence of two subscribing witnesses.

SETH WHEELER.

Witnesses:

E. WACKERHAGEN,
GEO. C. LEE.