

J. GROSS.
MOTIVE-POWER.

No. 187,845.

Patented Feb. 27, 1877.

Fig. 1

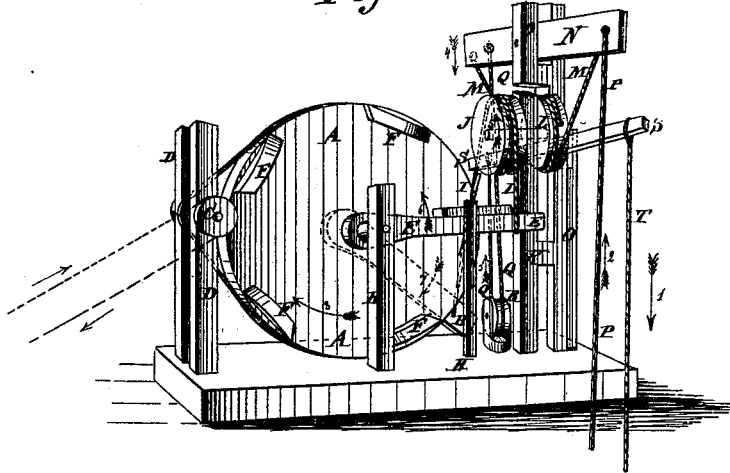
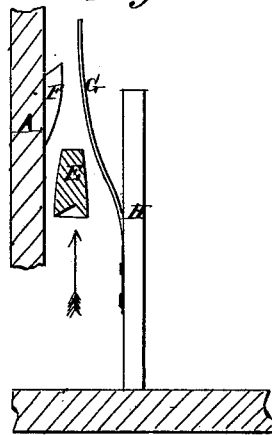


Fig. 2



WITNESSES:

A. W. Almqvist
J. H. Scarborough

INVENTOR:

J. Gross.
BY *[Signature]*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JARRATT GROSS, OF CATLETTSBURG, KENTUCKY.

IMPROVEMENT IN MOTIVE POWERS.

Specification forming part of Letters Patent No. **187,845**, dated February 27, 1877; application filed December 4, 1876.

To all whom it may concern :

Be it known that I, JARRATT GROSS, of Catlettsburg, in the county of Boyd and State of Kentucky, have invented a new and useful Improvement in Motive Power, of which the following is a specification :

Figure 1 is a perspective view of my improved motive power. Fig. 2 is a detail section of the same.

Similar letters of reference indicate corresponding parts.

The invention has for its object to furnish an improved motive power, and the construction and arrangement of parts composing the same are as follows :

A is a large wheel, the journals of which revolve in posts B. Around the wheel A passes a band, which passes around a shaft, C, pivoted to posts D, and from which motion is communicated to the machinery to be driven. To the journals of the wheel A are pivoted two levers, E, the outer ends of which are heavily weighted, so that when the levers E are raised and allowed to rest upon the shoulders of the projections F, attached to the sides of the rim of the wheel A, their weight may revolve the said wheel, and thus give motion to the machinery to be driven.

The levers E are raised alternately, and the projections F upon the opposite sides of the wheel A alternate with each other, so that one of said levers may always be operating, while the other is being raised.

The forward ends of the projections F are inclined, as shown in Fig. 2, so that they may readily push the levers E outward and pass them. The levers E are forced inward against the wheel A, as they pass the projections F, by springs G, attached to the posts H. To the ends of the weighted levers E are attached the ends of a rope, I, that is coiled around and attached to the pulley J, so that the two levers E may be raised alternately by the reciprocating movement of the pulley J. The pulley J is attached to the end of a short

shaft, which revolves in bearings in the post K, and to its other end is attached a pulley, L, so that the two pulleys J L may be rigidly connected together.

Around the pulley L is coiled a rope, M, the ends of which are attached to the ends of a lever, N, so that the pulleys J L may receive a reciprocating movement from the oscillation of the lever N. The lever N is pivoted at its center to a post, O, so as to be directly over the pulley L. To one end of the lever N is attached a rope or strap, P, to be pulled to operate the said lever N. To the other end of the lever N is attached the end of a rope, Q, which is passed down to and around a pulley, R, pivoted to the bed or platform of the machine. The rope Q then passes up, and its other end is attached to the end of a lever, S, which is pivoted at its center to the post O, at the side of or a little below the lever N. To the other end of the lever S is attached a rope, T, to be pulled to operate the said lever S.

By this construction, by pulling down upon the ropes P T alternately, the wheel A will be revolved, and motion will be given to the machinery to be driven.

The machine may be stationary, and used to drive a stationary machine; or it may be mounted upon wheels, and used to drive a vehicle or other moving machine.

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

The combination of the wheel A, having projections F, the weighted levers E, the rope connecting them with the pulley J, the pulley L, rope M, and lever N, the lever S, for assisting the operation of lever N, and the pull-ropes P T, all constructed and arranged as shown and described, to operate as specified.

JARRATT GROSS.

Witnesses:

JOHN H. JUSTICE,
JAMES H. THORNBURY.