

W. J. PERRIN.
MECHANICAL POWER.

Patented July 10, 1883.

Fig. 2.

Witnesses:
 Phil C. Dietrich.
 R. M. MacBride.

Inventor:
 William J. Perrie
 by Robt. J. Murray
 Attorney.

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Phil C. Dietrich.
R. W. MacBride.

Inventor:

William J. Perrin

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UNITED STATES PATENT OFFICE.

WILLIAM J. PERRIN, OF MINEOLA, TEXAS, ASSIGNOR OF ONE-HALF TO
WALTER F. FREEMAN, OF SAME PLACE.

MECHANICAL POWER.

SPECIFICATION forming part of Letters Patent No. 281,130, dated July 10, 1883.

Application filed January 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. PERRIN, a citizen of the United States, residing at Mineola, in the county of Wood and State of Texas, have invented certain new and useful Improvements in Mechanical Powers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to mechanical powers, the object being to combine with an ordinary tread-wheel mechanical devices adapted to be operated by horse-power to revolve said wheel.

The invention consists in the features of construction and combination of parts hereinafter fully described, and pointed out in the claim.

In the drawings, Figure 1 represents an elevation of my improvement, and Fig. 2 represents a sectional plan view of the same.

The frame of the device consists of the base *a* and upper cross-bar, *b*, connected by the vertical supports *c c*.

B represents a gear-wheel mounted upon an inclined shaft, *C*, the latter being supported in bearings *d d* of the frame. The under side of the wheel *B* is provided with gear-teeth *e*, adapted to mesh with a gear-pinion, *D*, mounted upon the end of a horizontal shaft, *E*, supported in suitable bearings, *f f*, and carrying a belt-wheel, *F*, to receive a belt to transmit motion to any desired machinery.

The device thus far described is the usual tread-mill, which heretofore has been revolved by the tread of horses or oxen. My purpose is to revolve the wheel by the application thereto of mechanical devices.

G represents a horizontal shaft supported in pendent bearings or hangers *g g*, adjacent to the inclined wheel *B*, and carrying near one end a friction-wheel, *H*, adapted to bear on the wheel *B* at the point *x*. The opposite end of the shaft *G* is provided with a cog-wheel, *I*, adapted to mesh with a crown-wheel, *J*, the latter being mounted upon a vertical shaft, *K*, supported in bearings *k k* of the frame, and provided with an operating sweep or lever, *L*. To the latter is hitched a horse, which is driven around the shaft *K* to operate the machine.

It will be apparent that the sweep *L* may be of any length desired, and that its length will regulate the power of the machine.

The friction-wheel *H* being arranged upon the tread-wheel just at the point where the least force will revolve the latter, very little power will be required to transmit a regular powerful motion to the wheel, and a single horse or mule can by the employment of my devices do an immense amount of work, which could only be done heretofore by a large number of horses.

I do not limit myself to the exact construction here shown and described, but reserve to myself the right to make all such changes as may properly fall within the scope of my invention.

I am aware that an inclined wheel has been driven by mechanical devices which gear therewith and are actuated by horse-power. My invention will be distinguished from both by the special construction employed, and from the fact that the friction-wheel *H*, which bears upon the wheel *B*, offers little or no resistance to the revolution of said wheel while it is driving the same, while the wheel *B* is almost entirely free from cog and gear connections, which greatly impede its motion.

I claim—

The combination, with the frame, of an inclined shaft carrying a combined friction and gear wheel, *B*, a horizontal shaft supported by hangers, and carrying at one end a friction-wheel adapted to bear upon the wheel *B* at the point *x*, and at its opposite end a gear-wheel adapted to operate a crown-wheel mounted upon a vertical shaft, and a shaft, *E*, carrying a pinion which is driven by its gear-connection with the wheel *B*, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM J. PERRIN.

Witnesses:

F. O. MCCLEARY,
G. B. HARRIS.