J. W. JACKSON.

HORSE-POWER.

No. 184,382. Patented Nov. 14, 1876.

Fig. 1.

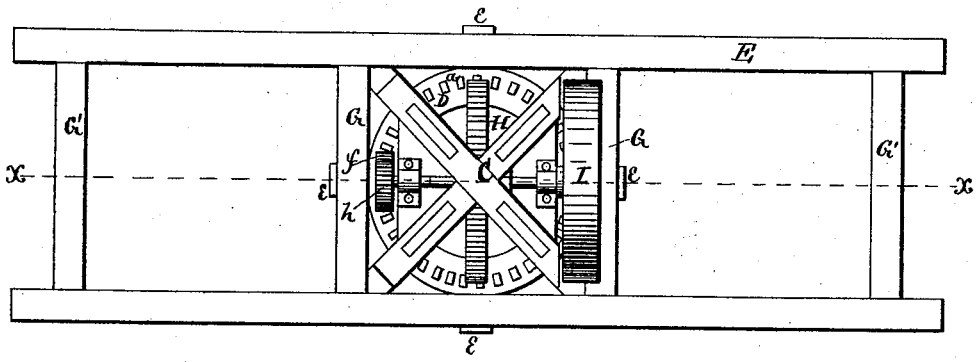


Fig. 2.

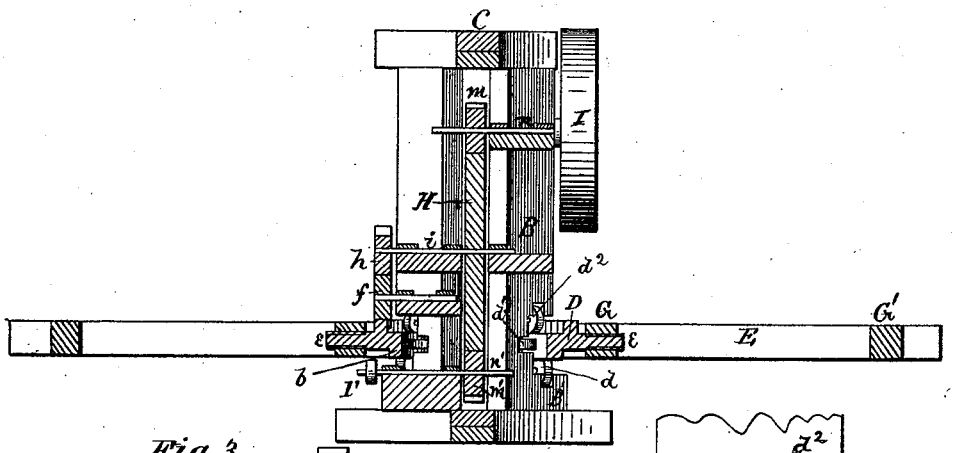


Fig. 3.

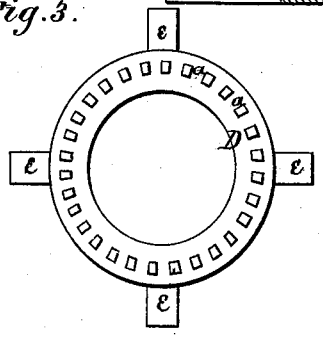
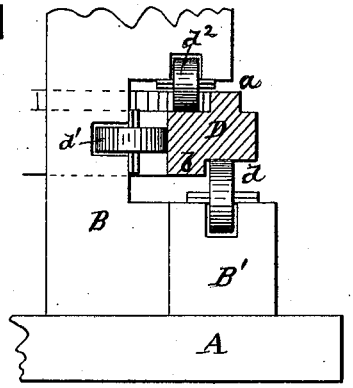


Fig. 4.



WITNESSES

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JESSE W. JACKSON, OF AMERICUS, GEORGIA.

IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **184,382**, dated November 14, 1876; application filed October 11, 1876.

To all whom it may concern:

Be it known that I, JESSE W. JACKSON, of Americus, in the county of Sumter, and in the State of Georgia, have invented certain new and useful Improvements in Horse-Power; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a horse-power, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of my horse-power. Fig. 2 is a longitudinal section of the same through the line *x x*, Fig. 1. Fig. 3 is a plan view of the main cog-wheel. Fig. 4 is an enlarged section of said cog-wheel, showing the friction-wheels for holding it in position.

A represents the base of my horse-power, made in the form of a cross, and upon said base are placed and secured four upright posts, B B, connected at their upper ends by a cross-frame, C. D represents the main cog-wheel, consisting simply of an annular rim with a circle of cogs, *a a*, on its upper surface, and around its inner circumference it has a downwardly-projecting flange, *b*, as shown in Figs. 2 and 4. This wheel is supported upon friction wheels or rollers *d d*, mounted in suitable bearings upon short posts B′ B′, secured on the base A on the outside of each post B, said friction wheels or rollers *d* working on the under side of the wheel D, outside of the flange *b*. In each post B are further arranged two friction wheels or pulleys, d^1 and d^2. The wheel d^2 bears on top of the wheel D, inside of the circle of cogs *a*, and the wheel d^1 bears against the inner face of the wheel.

By means of the wheels *d* d^1 d^2 the large cog-wheel D moves, or can be moved, very easily around with but little friction. From the outside of the wheel D, at equal distances apart, project four tenons, *e e*, in radial directions. On two opposite tenons are placed two levers, E E, and on the other two tenons are placed two cross-bars, G G, which are framed in and connect the levers. These levers are, at their ends, also connected by cross-bars G′ G′. The horses are to be hitched to these levers, and, by the framing of said levers on the four tenons of the wheel D, the draft will be on all four sides of the wheel at the same time.

The large cog-wheel D meshes with a pinion, *f*, and this with a pinion, *h*, on a shaft, *i*. On the inner end of this shaft is secured a large cog-wheel, H, standing upright between the four posts B B. This large cog-wheel H gears with two pinions, *m m′*, upon two shafts, *n n′*, one above and one below, and upon said shafts are secured suitable band-wheels I I′, as shown.

It will thus be seen that by this construction of the parts two band-wheels, one above and one below, may be run at the same time.

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

1. The combination of the horizontal cog-wheel D, idle-pinion *f*, shaft *i*, with pinion *h* and upright cog-wheel H, and the top and bottom shafts *n n′*, with pinions *m m′* and band-wheels I I′, all substantially as and for the purposes herein set forth.

2. The combination of the cog-wheel D, with radial tenons *e;* the parallel levers E E, with cross-bars G G, posts B B′, rollers *d* d^1 d^2, idle-pinion *f;* pinion *h*, with shaft *i*, cog-wheel H, shafts *n n′*, pinions *m m′*, and band-wheels I I′, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of September, 1876.

JESSE WEST JACKSON.

Attest: F. L. OURAND,
W. H. C. DUDLEY.