J. E. MULDROW.

HORSE-POWER.

No. 182,691. Patented Sept. 26, 1876.

Fig. 1.

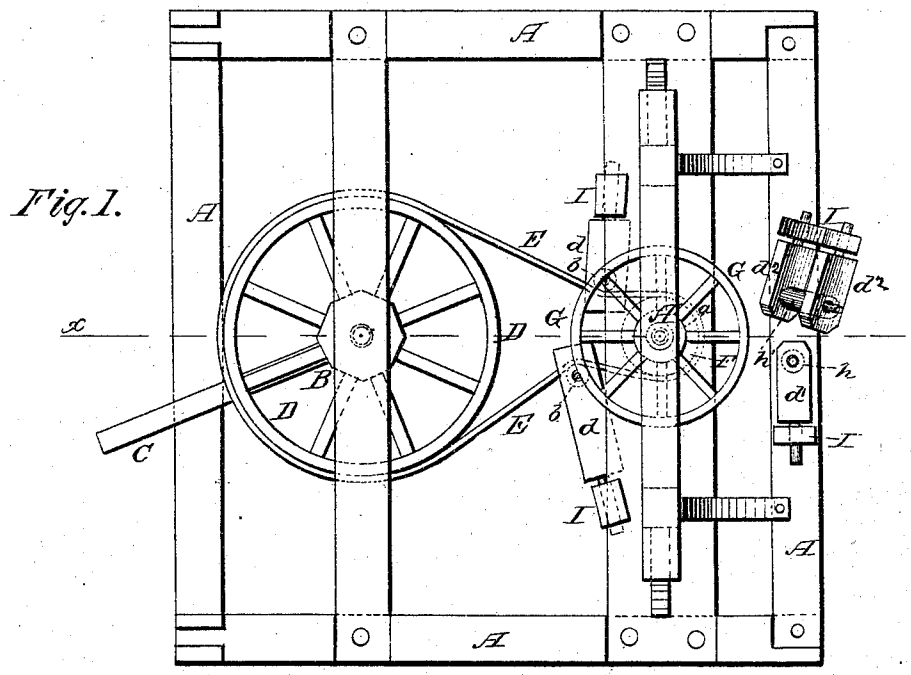
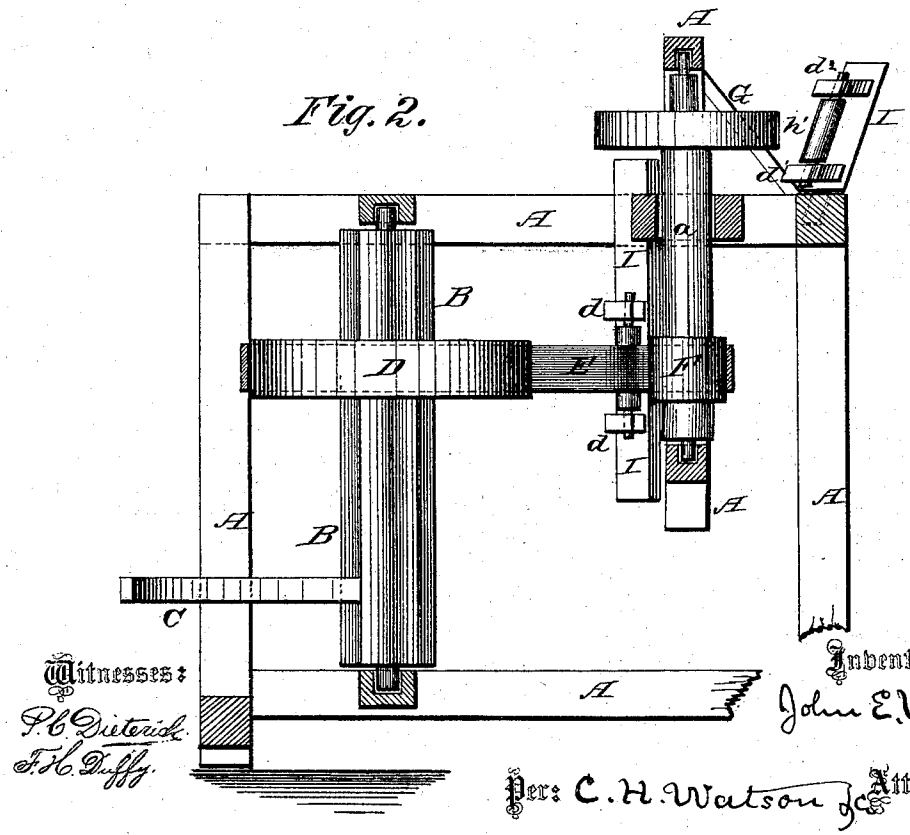


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN E. MULDROW, OF LYNCHBURG, SOUTH CAROLINA.

IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **182,691**, dated September 26, 1876; application filed July 8, 1876.

To all whom it may concern:

Be it known that I, JOHN E. MULDROW, of Lynchburg, in the county of Sumter and State of South Carolina, have invented certain new and useful Improvements in Horse-Powers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

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

In the annexed drawing, Figure 1 is a plan view, and Fig. 2 is a central vertical section on line *x x*, Fig. 1, of my invention.

A represents a suitable frame-work, of which the upper part is supposed to be the floor of the gin-room, and the lower part a room below the same. In the frame A is a vertical shaft or roller, B, placed upon pivots, and provided with a sweep, C, for the attachment of the team. On the shaft or roller B is secured a large horizontal wheel, D, around which is placed a belt, E, passing around a pulley, F, on a vertical shaft, *a*, and on this same shaft, up in the gin-house, is secured another horizontal wheel, G, to be connected by a band with the cotton-gin or other machinery to be driven by the horse-power. Between the wheel D and pulley F are arranged two vertical rollers, *b b*, each having their bearings in two horizontal arms, *d d*, which are movable out and in in a hanger, I, for tightening the belt E, holding the same to its place, and guiding it properly to the wheel D and drum F. In the gin-house there are two similar rollers, *h h'*, set in arms d^1 d^2, for tightening the belt that connects the wheel G with the gin, and for guiding and holding it to its place. The arm d^2 is set at or on an incline outward from the opposite arm *d*, and set in the frame A by a pivot, which is left free to turn to accommodote the roller to the position of the belt, which is important, especially where a cross-belt is used. The rollers *b b* and *h* are all placed in vertical position, while the roller *h'* is set in an inclined position for the purpose of properly grinding a twisted or crossed belt.

With my invention I can run a cotton-gin by a horse-power, in which both of the wheels are horizontal, with bands passing around them. The rollers, as well as the drum on the shaft *a*, are vertical, and the horse-power runs without the aid of cogs.

The horse-power is cheap, simple in construction, and a cotton-gin may be run with one-half the power it will take for a cogged horse-power.

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

The incline pivoted arm d^2, arm d^1, rollers *h h'*, in combination with the rollers *b b*, belt E, wheel D, roller B, and vertical shaft *a*, all constructed and arranged substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN E. MULDROW.

Witnesses:

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