J. W. MULLINS.

Mechanical Movement.

No. 201,039. Patented March 5, 1878.

Fig. 1.

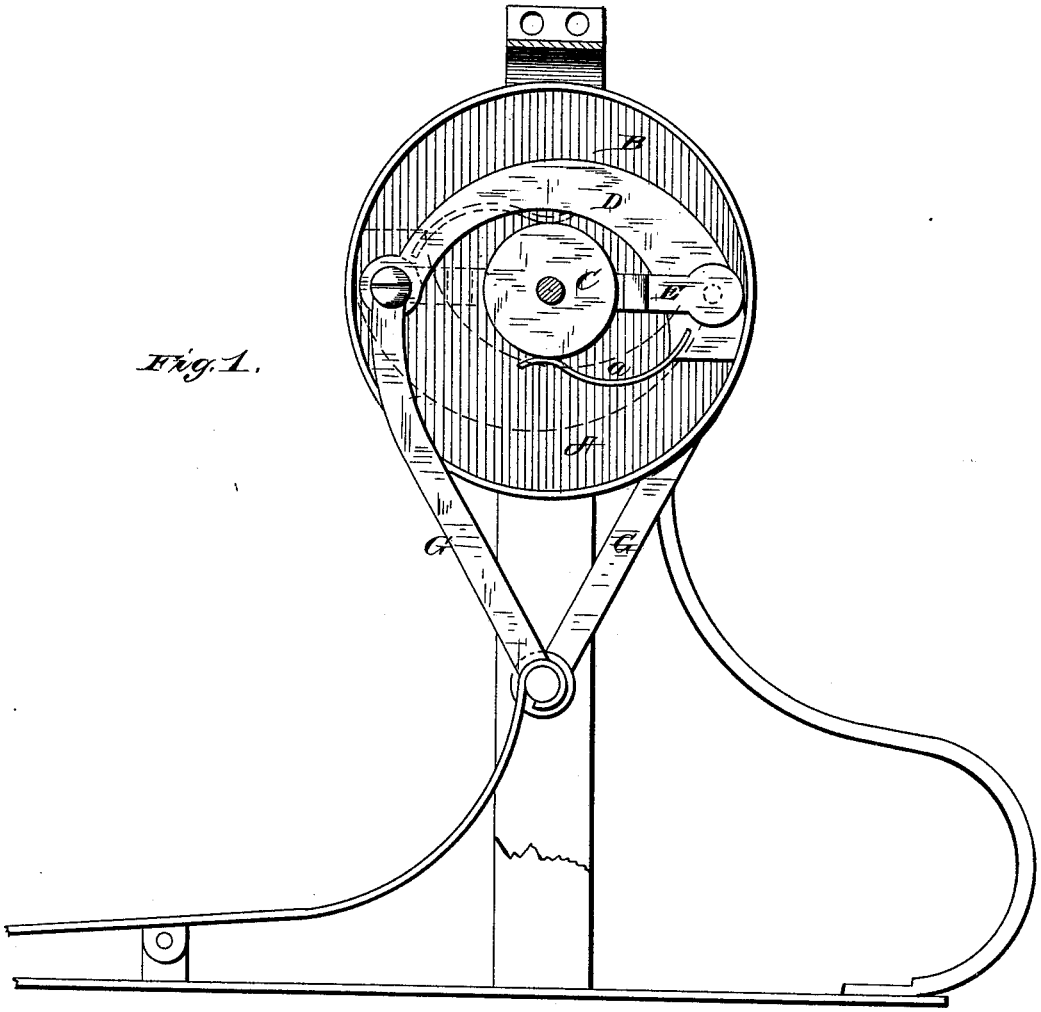
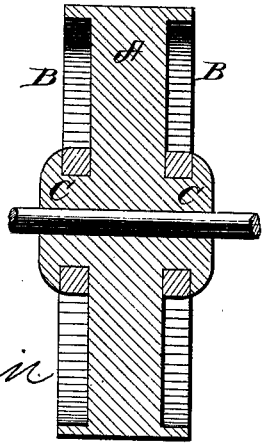


Fig. 2.



WITNESSES

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JOHN W. MULLINS, OF LONDON, KENTUCKY.

IMPROVEMENT IN MECHANICAL MOVEMENTS.

Specification forming part of Letters Patent No. **201,039**, dated March 5, 1878; application filed December 18, 1877.

To all whom it may concern:

Be it known that I, JOHN W. MULLINS, of London, in the county of Laurel, and in the State of Kentucky, have invented certain new and useful Improvements in Mechanical Movements; 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 circular grooved wheel, with devices so arranged as to take up its lost motion and yet propel any machinery without crank or clutch, and it may be applied or used on any machinery desired.

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 drawings, in which—

Figure 1 is a side elevation of my invention. Fig. 2 is a central section of the wheel.

A represents a wheel or cylinder of any suitable dimensions, in each side of which is turned an annular recess, B, leaving a hub or center, C, projecting on each side. Each end of the hub or center C has a circumferential groove formed thereon. In each recess B is placed a curved lever, D, and in the groove on the hub is placed a brake, E. This brake extends outward and is attached to the end of the lever D, which lever is so arranged as to come in contact with the inside of the rim left on the wheel.

When the long end of the lever is pulled down on the brake, it will cause the short end to press against the inside of the rim and turn the wheel.

a is a spring, attached to the short end of the lever and bearing against the under side of the brake. The long end of the lever is, by a connecting-rod, G, connected with a treadle or other means for moving up and down.

Both sides of the grooved or recessed wheel are provided with the devices just described; and this wheel or cylinder can be made to answer the purpose of a crank, without dead-center, a balance-wheel, and also a band-wheel, all in one, and for the same purpose.

It will be seen that the harder the levers are pulled the harder they will bite against the rim, and when in motion it will run without any noise or lost motion, as the springs *a* take up all lost motion, or rather prevent any lost motion.

This device may be used for running almost any kind of machinery.

I do not broadly claim a motive power in which two rocking disk-plates are used upon a shaft in connection with a revolving wheel grooved on both sides.

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

The combination, with the wheel A, having an annular recess, B, in each face, the hub C, in the center of the wheel, provided with an annular groove around each end, the curved levers D D, one being placed on one side of the wheel and the other on the other side, and extended from one side of the recess to the other, the brakes E, pivoted to the levers D and having their ends placed in the grooves in the hub, the springs *a a*, and the bars G G, connecting the free ends of the levers D D, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of November, 1877.

JOHN WESLEY MULLINS.

Witnesses:
JOHN B. LUCAS,
A. L. REID.