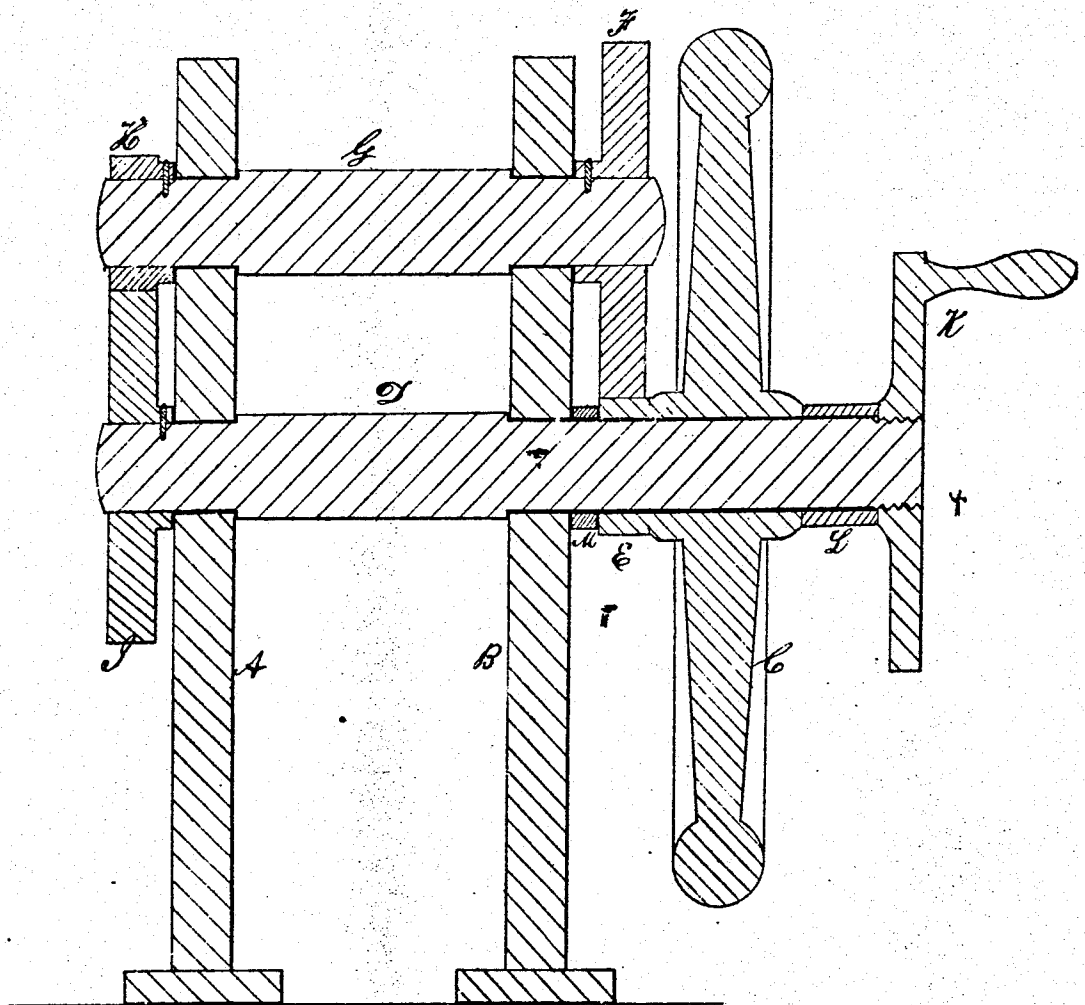


JOHN W. KEELY.

Improvement in Fly-Wheels.

No. 118,022.

Patented August 15, 1871.



Witnesses
Wm R Wright
John C Kline

Inventor
J W Keely

UNITED STATES PATENT OFFICE.

JOHN W. KEELY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO NATHAN MIDDLETON AND ALLEN MIDDLETON, JR., OF SAME PLACE.

IMPROVEMENT IN FLY-WHEELS.

Specification forming part of Letters Patent No. 118,022, dated August 15, 1871.

To all whom it may concern:

Be it known that I, JOHN W. KEELY, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Fly-Wheels, of which the following is a specification:

My invention consists in arranging a fly-wheel on the main shaft of any engine or foot or horse-power, independently, in combination with gearing, as hereinafter described, whereby I am enabled, without danger, to run the fly-wheel at a high velocity, and accomplish the work of an ordinary fly-wheel with one of much less weight.

The drawing represents in full size a longitudinal vertical section of a device embodying my invention.

A and B are uprights, which furnish bearings and support for the other parts of the device. C is the fly-wheel, which is not rigidly attached to the main shaft D, but arranged independently thereon. The hub of the fly-wheel C is a little extended, so as to form a cog-wheel, E, which gears into the cog-wheel F, which is rigidly attached to the shaft G, which has attached to it

rigidly, also, the cog-wheel H, which gears into the cog-wheel I, which is rigidly attached to the main shaft D. K represents a crank, by which power is applied. L and M are collars, designed to keep the fly-wheel in position.

The velocity of the fly-wheel C is regulated by the proportions of the gear-wheels, which may be increased or diminished in diameter at pleasure; but they must be so constructed that the shaft of the gear-wheels F and H shall run parallel with the main shaft.

The fly-wheel may be made in any substantial manner; but I prefer to make it solid from hub to rim, rather than with spokes or arms; and I also prefer that it should be turned up true and balanced.

I claim—

The fly-wheel C, in combination with the gear-wheels E F H I, all arranged and operating in relation to shaft D, substantially as set forth.

Witnesses:

J. W. KEELY.

WM. R. WRIGHT,
JOHN C. CLIME.