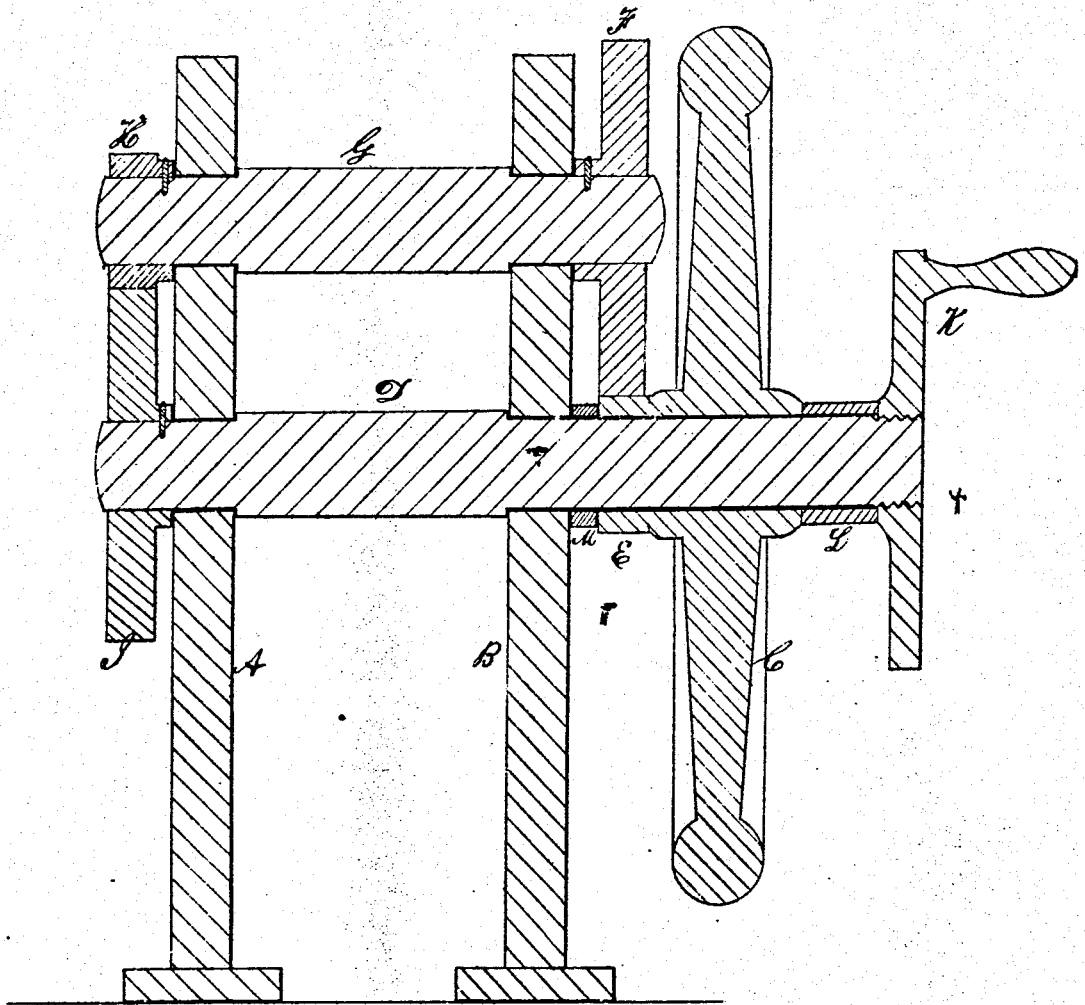


JOHN W. KEELY.

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 horsepower, 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. CLINE.