J. F. DRIVER, J. T. LUNA, W. H. SANDERS & A. P. HILL.

Motor.

No. 207,403. Patented Aug. 27, 1878.

Fig. 1.

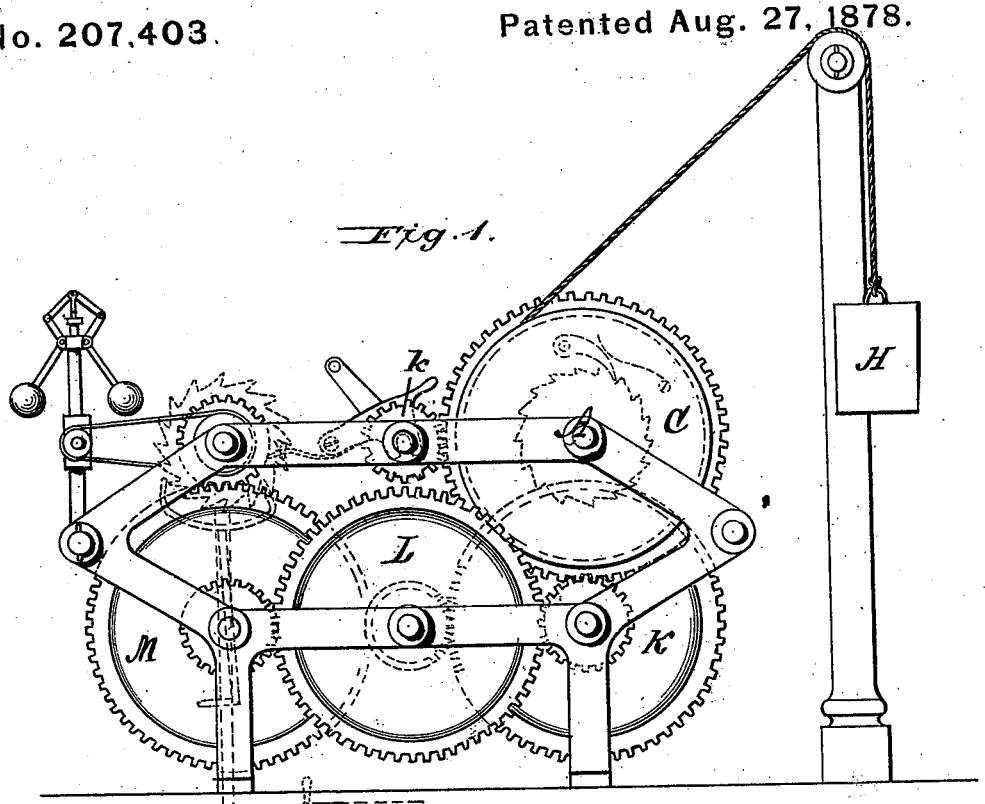


Fig. 2.

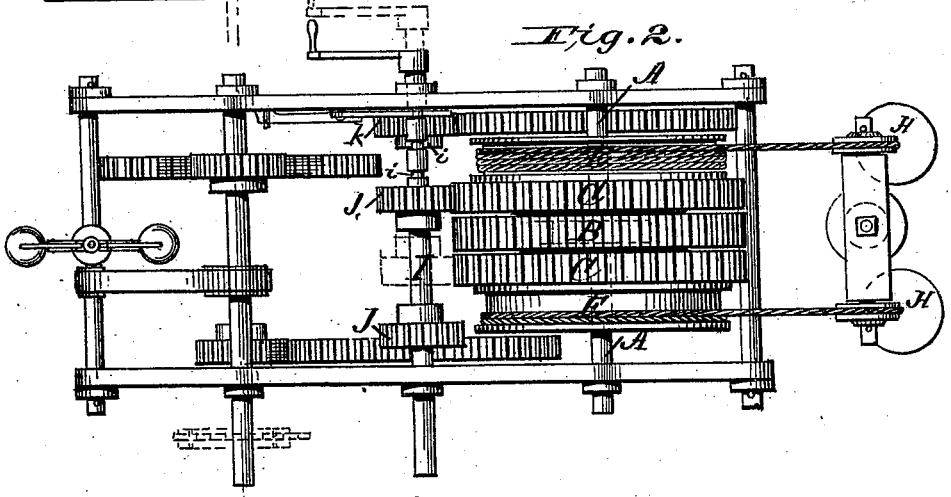
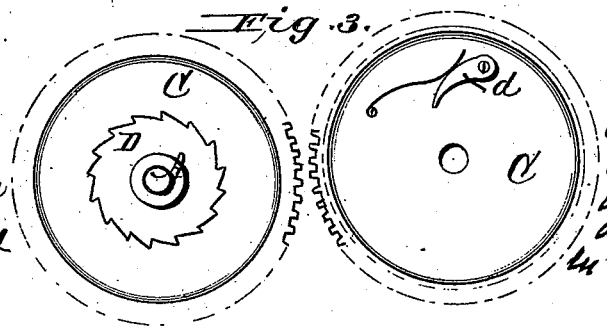


Fig. 3.



Attest
H. C. Penne
Daniel Breed

Inventors
John F. Driver
James T. Luna
William H. Sanders
Addison P. Hill.
by C. M. Parks Atty.

UNITED STATES PATENT OFFICE.

JOHN F. DRIVER, JAMES T. LUNA, WILLIAM H. SANDERS, AND ADDISON P. HILL, OF LEWISBURG, TENNESSEE.

IMPROVEMENT IN MOTORS.

Specification forming part of Letters Patent No. **207,403**, dated August 27, 1878; application filed June 15, 1878.

To all whom it may concern:

Be it known that we, JOHN F. DRIVER, JAMES T. LUNA, WILLIAM H. SANDERS, and ADDISON P. HILL, of Lewisburg, Marshall county, Tennessee, have invented an Improvement in Motors; and we do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a side view, Fig. 2 is a top or plan view, and Fig. 3 is a detail view, of our invention.

Our invention relates to a motive power to be used for operating any stationary machinery; and it consists of a series of weights and spools operating a driving-shaft, which shaft drives a system of gearing regulated by a pendulum or governor, or both. The pulleys and weights are wound up by a series of sliding pinions, each of which winds a spool separately, and so may not interfere with the power of the machine.

In the drawings, A is the driving-shaft, upon which is secured the driving-wheel B. Upon either side of the wheel B are idle-wheels C C, having ratchet-wheels D and pawls *d*, so as to allow a rotation in one direction, but prevent a reverse motion. Attached to the wheels C are the spools E E, upon which the cord that holds the weight H is wound. There may be any number of spools on the driving-shaft A, and as many weights as spools, all tending to give power to the driving-wheel B when wound up. Contiguous to the wheels C, which are cogged, is a shaft, I, having winding-pinions J J. These pinions J J may either move loosely on the shaft I in a spline or otherwise, or the shaft itself may move longitudinally in its bearings, and be kept in place by grooves in the shaft I, into which the stop *k* falls. It is so arranged that a winding-pinion, J, may be made to engage the winding-wheels C by moving the pinion upon its shaft I or moving the shaft in its bearings, as the case may be, and then by turning a crank on the end of the shaft I the winding-pinion which is engaged will turn the winding-wheel which is engaged, and so wind the cord of a weight on its spool. Any weight may be so wound, while the other weights are undisturbed and the motion and function of the driving-wheel B uninterrupted. Engaged with the driving-wheel B is a system of gearing, K, L, and M, which leads to a pendulum or governor, or both, by which the speed of the motor is regulated. Any machinery may be attached to any part of the motor and be driven. The winding apparatus allows the weights to be wound each independently of the other while the motor is in motion.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A motor having a series of winding wheels and spools, any one of which may be engaged with a sliding winding-pinion, substantially as described.

2. In a motor, the combination of a driving-shaft with a series of winding spools and wheels and a series of sliding winding-pinions, substantially as described.

The above specification of said invention signed and witnessed at Lewisburg this 4th day of June, A. D. 1878.

JOHN F. DRIVER.
JAMES T. LUNA.
WILLIAM H. SANDERS.
ADDISON P. HILL.

Witnesses:
H. F. LEONARD,
W. T. MCLAIRD.