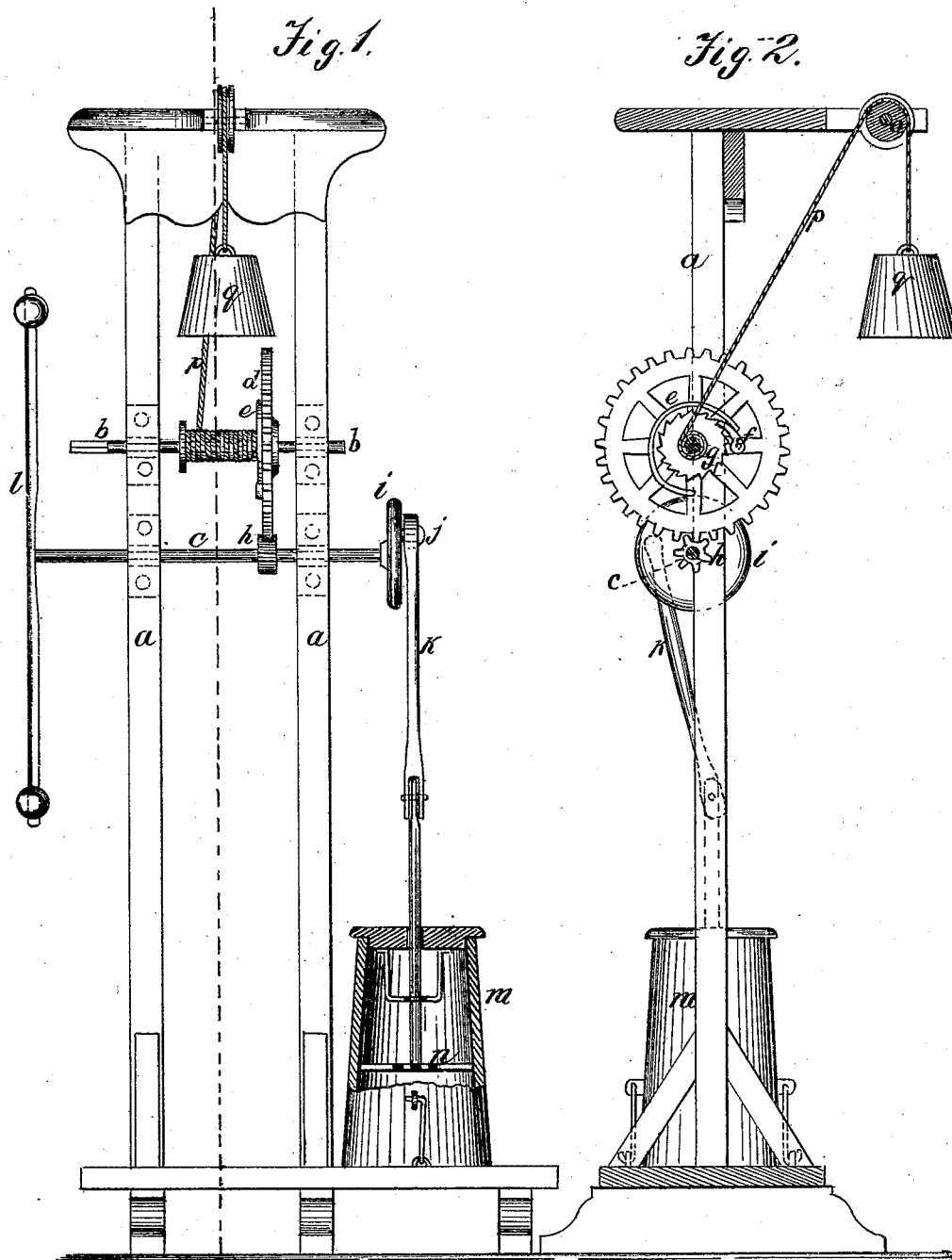


I. G. HUBBARD.

Improvement in Motor Machines.

No. 115,058.

Patented May 23, 1871.



Witnesses:
A. Ruppert.
Powland Cox

Inventor:
Isaac G. Hubbard,
by Theodore Mungen
his Attorney.

UNITED STATES PATENT OFFICE.

ISAAC G. HUBBARD, OF NOKOMIS, ILLINOIS.

IMPROVEMENT IN MOTOR-MACHINES.

Specification forming part of Letters Patent No. 115,058, dated May 23, 1871.

To all whom it may concern:

Be it known that I, ISAAC G. HUBBARD, of Nokomis, in the county of Montgomery and State of Illinois, have invented certain new and useful Improvements in Motor-Machines; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 is a vertical section through the dotted line in Fig. 1.

My invention relates to improving motor-machines for driving sewing-machines, churns, pumps, &c.; and consists in combining an axle, provided with a toothed wheel, spring, pawl, and ratchet, a cord and weight or a spring and a shaft, provided with a pinion-wheel, band-wheel, and a fly, the whole being arranged in such a manner that the cord, with weight attached; or the spring may be wound upon the axle and permitted to unwind or run down, and thus operate the motor; as will hereafter more fully appear.

In the drawing, *a* is the frame, in which the axle *b* and shaft *c* have their bearings; *d* is the toothed wheel; and *e*, *f*, and *g* are the spring, pawl, and ratchet. *h* is the pinion-wheel on the shaft *c*. *i* is the band-wheel provided with a stud, *j*, to which the pitman *k* is secured. *l* is the fly used to equalize the motion of the machine. *m* is a churn, the dasher *n* being joined to the pitman *k*, used to show the application of the principle. The pulley

o, over which the cord *p* plays, is shown at the top of the frame *a*.

When the motor is used in the house the pulley *o* should be suspended from a hook in the ceiling.

When a spring is used, instead of the cord *p* and weight *q*, for running a sewing-machine, the motor-machine should be placed under the table and one end of the spring secured thereto, the other end being secured to the axle *b* of the motor and wound thereon.

Motion is communicated from the motor to the machine to be driven either through the pitman *k* or through an endless band placed upon the band-wheel *i*, as convenience demands.

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

In combination with the axle *b* provided with toothed wheel *d*, spring, pawl, and ratchet *e*, *f*, and *g*, cord *p*, weight *q*, and pulley *o*, or the spring described, and the shaft *c* provided with the pinion-wheel *h*, band-wheel *i*, and fly *l*, arranged as described, and for the purpose set forth.

In testimony that I claim the foregoing improvement in motor-machines, as above described, I have hereunto set my hand and seal this 3d day of April, 1871.

I. G. HUBBARD. [L. S.]

Witnesses:

J. R. WOLFE,
A. SMITH.