

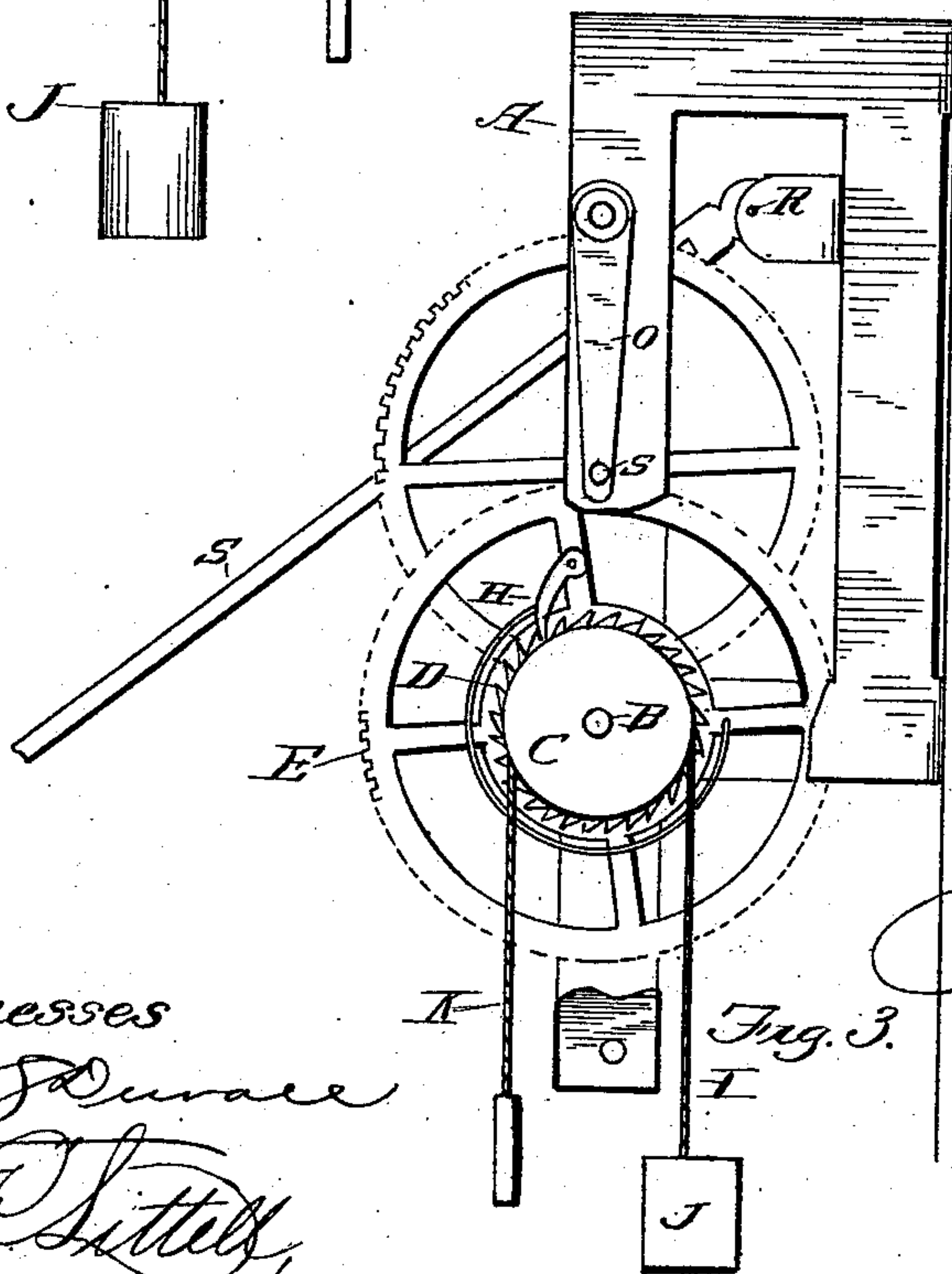
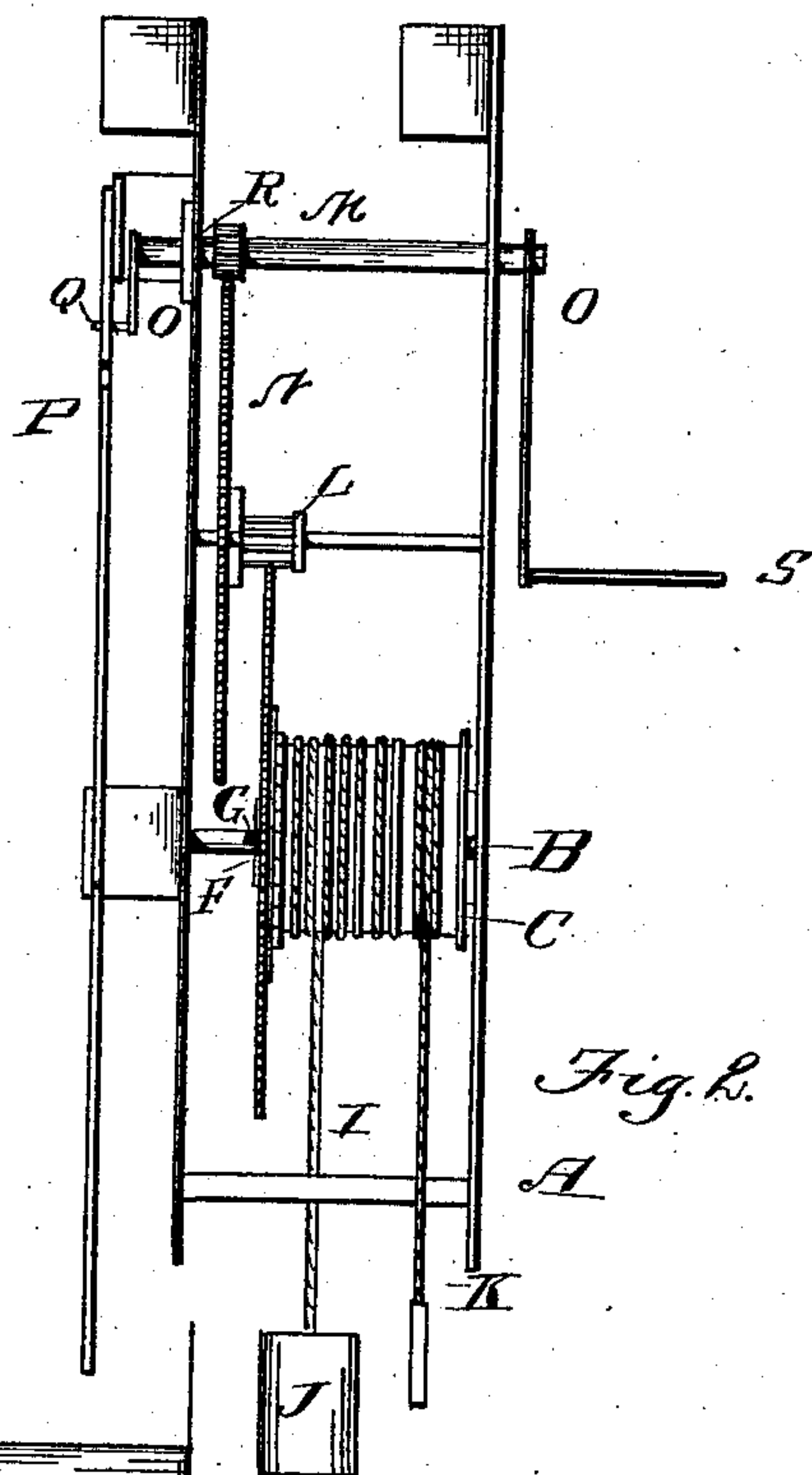
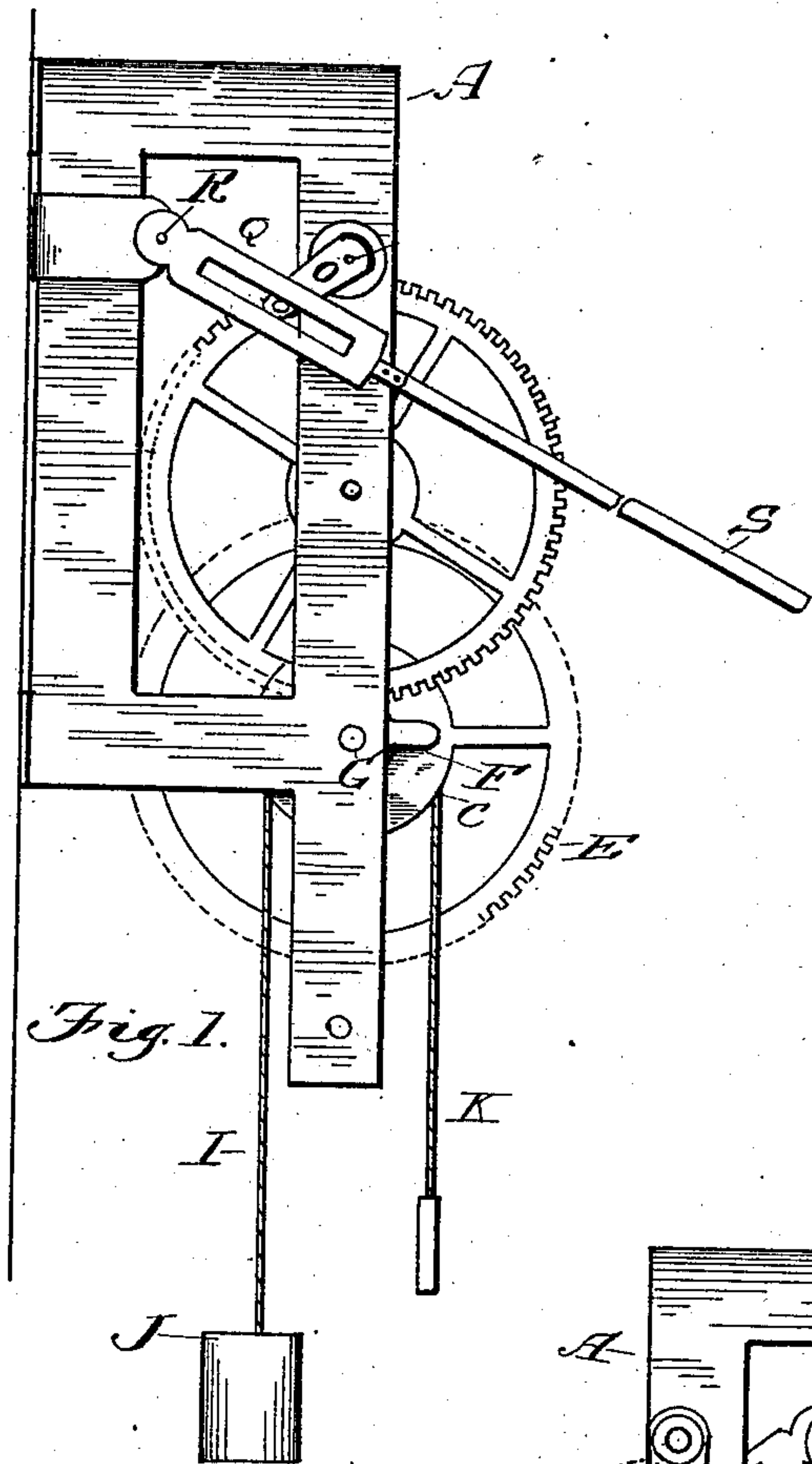
(No Model.)

M. L. RISON.

MOTOR.

No. 287,777.

Patented Oct. 30, 1883.



Witnesses
Wm. Durand
J. R. Little

M. L. Rison,
Inventor.
by C. Snow & Co.
Attys.

UNITED STATES PATENT OFFICE.

MASTIN LEE RISON, OF CLARKSVILLE, TENNESSEE.

MOTOR.

SPECIFICATION forming part of Letters Patent No. 287,777, dated October 30, 1883.

Application filed September 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, MASTIN L. RISON, a citizen of the United States, residing at Clarksville, in the county of Montgomery and State of Tennessee, have invented a new and useful Motor, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to motors such as are adapted to operate churns, fans, &c.; and its object is to provide a motor possessing superior advantages in point of simplicity, inexpensiveness, durability, ease of operation, and general efficiency.

In the drawings, Figure 1 is a side elevation of my improved motor. Fig. 2 is a front elevation of the same. Fig. 3 is another side view, parts being broken away to show the construction.

Referring to the drawings, A designates the frame of my improved motor, which is secured in elevated position by any suitable means, and provides bearings for a main horizontal shaft, B, that carries a drum, C, having a ratchet-disk, D, at one end, a main gear-wheel, E, being loosely arranged on shaft B adjoining this ratchet end, and retained in position against the drum by means of a spider plate or disk, F, held by a pin, G, passing through said shaft.

The gear-wheel E carries a spring-actuated pawl, H, that is retained in engagement with the ratchet D, so that when the drum is turned in one direction by action of the rope I, having the end weight, J, the wheel E is carried with the drum and revolves therewith. As the rope I unwinds from the drum, the rotary movement of the latter causes a cord, K, to wind upon it, and when the rope I has unwound its entire length it can be rewound by simply drawing on cord K to turn the drum, during which movement the ratchet D will pass under the pawl and not engage the same. Thus the device can be easily kept in motion by simply drawing on cord K at intervals.

The movement of wheel E is transmitted to a gear-wheel, L, on the main operating-shaft M by means of an intermediate gear, N, or a train of gears, and from this shaft M the power is applied to drive the churn-dasher, fan, or the like. To effect this the shaft M is provided with a crank, O, at one or both ends, which is connected to the fan or dasher, a rock-arm, P, being preferably employed, as shown. This rock-arm is formed with a longitudinally-disposed slot, Q, in which works the crank O, and is pivoted to the frame A, as at R. The handle or staff S of the fan or the device to be operated has then only to be secured to the rock-arm.

The operation and advantages of my invention will be readily understood. It is simple and convenient, and can be easily governed.

I claim as my invention—

1. The combination of the frame of the motor, the main operating-shaft having crank ends, means for operating said shaft, and the rock-arm hinged to the frame and formed with the slot in which moves the crank, substantially as and for the purpose set forth.

2. The combination of the frame of the motor, the main horizontal shaft carrying the drum, said drum having the ratchet teeth or disk at its end, the winding-cord wound on the drum in one direction, and the weighted rope wound on the drum in an opposite direction, the main gear-wheel loosely arranged near to the ratchet and carrying the spring-actuated pawl, the operating-shaft having the gear-wheel and crank ends, the train of intermediate gears, and the pivoted and slotted rock-arm, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MASTIN LEE RISON.

Witnesses:

J. N. ROGERS,
J. G. JOSEPH.