

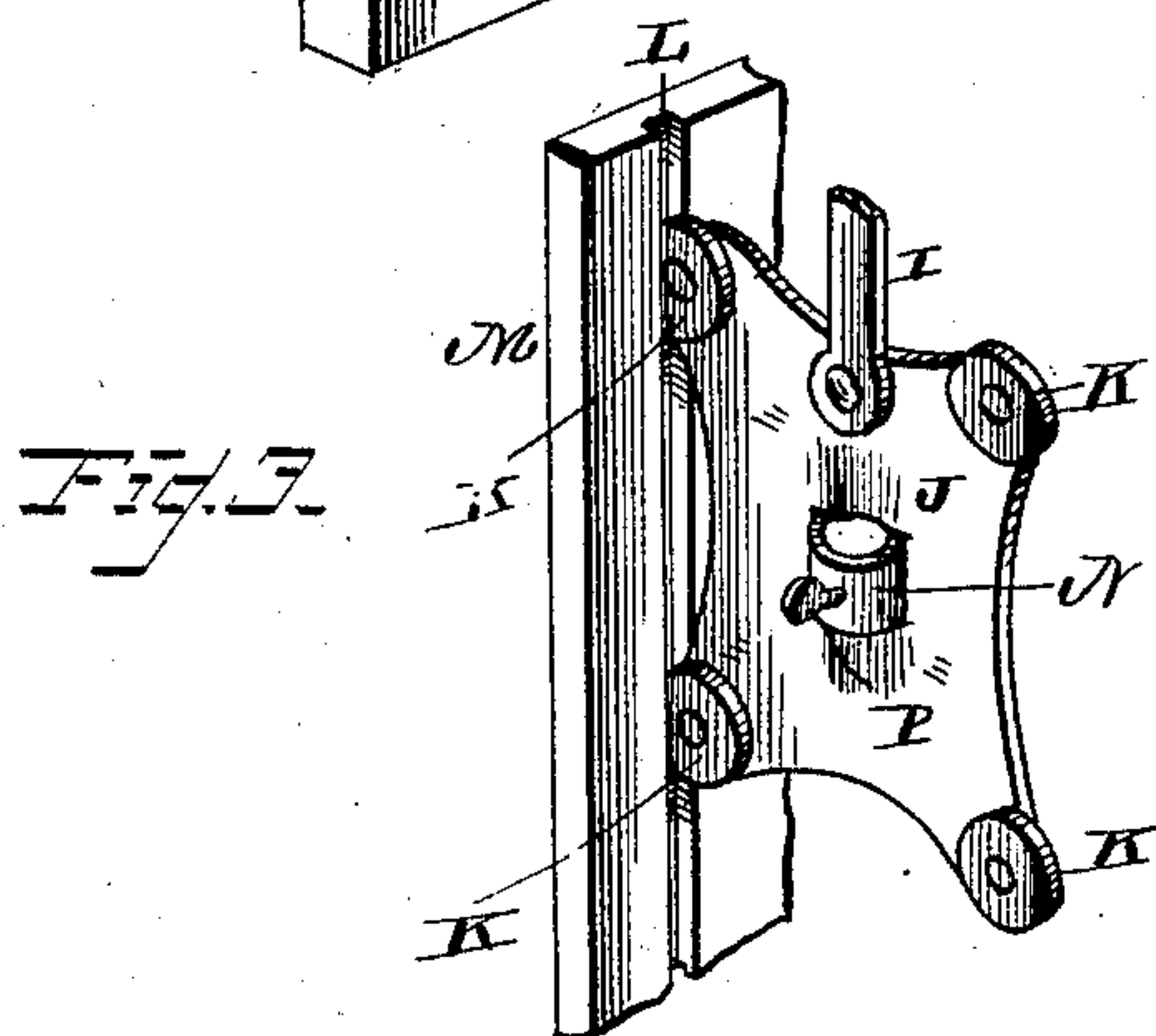
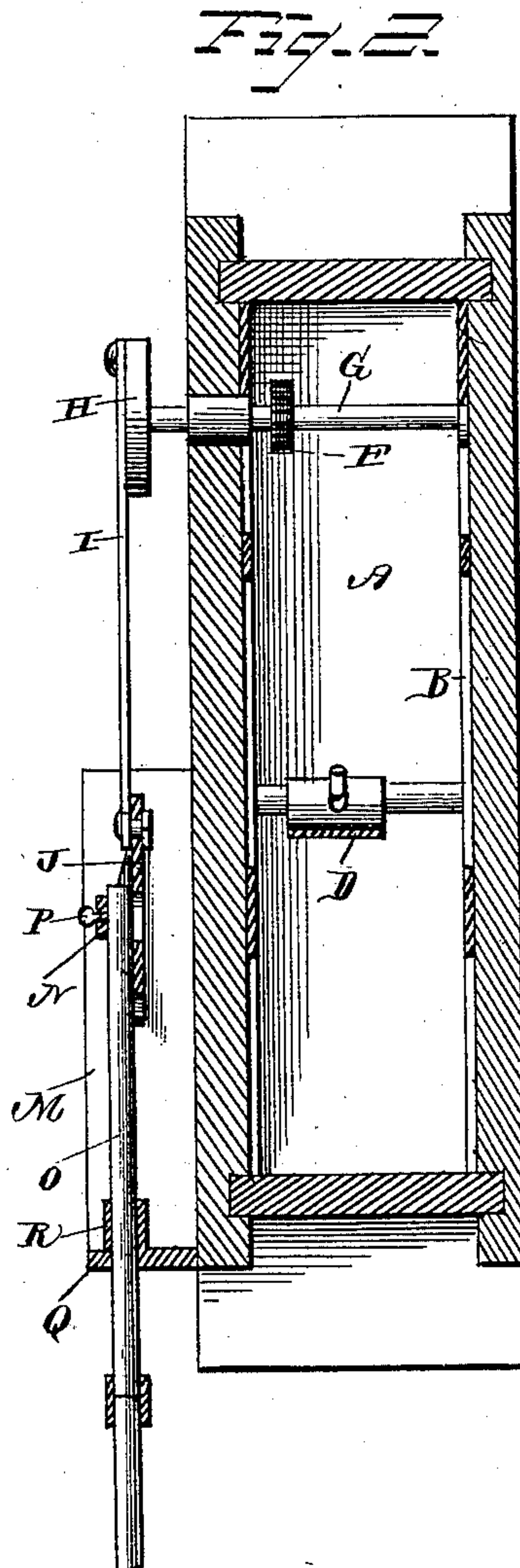
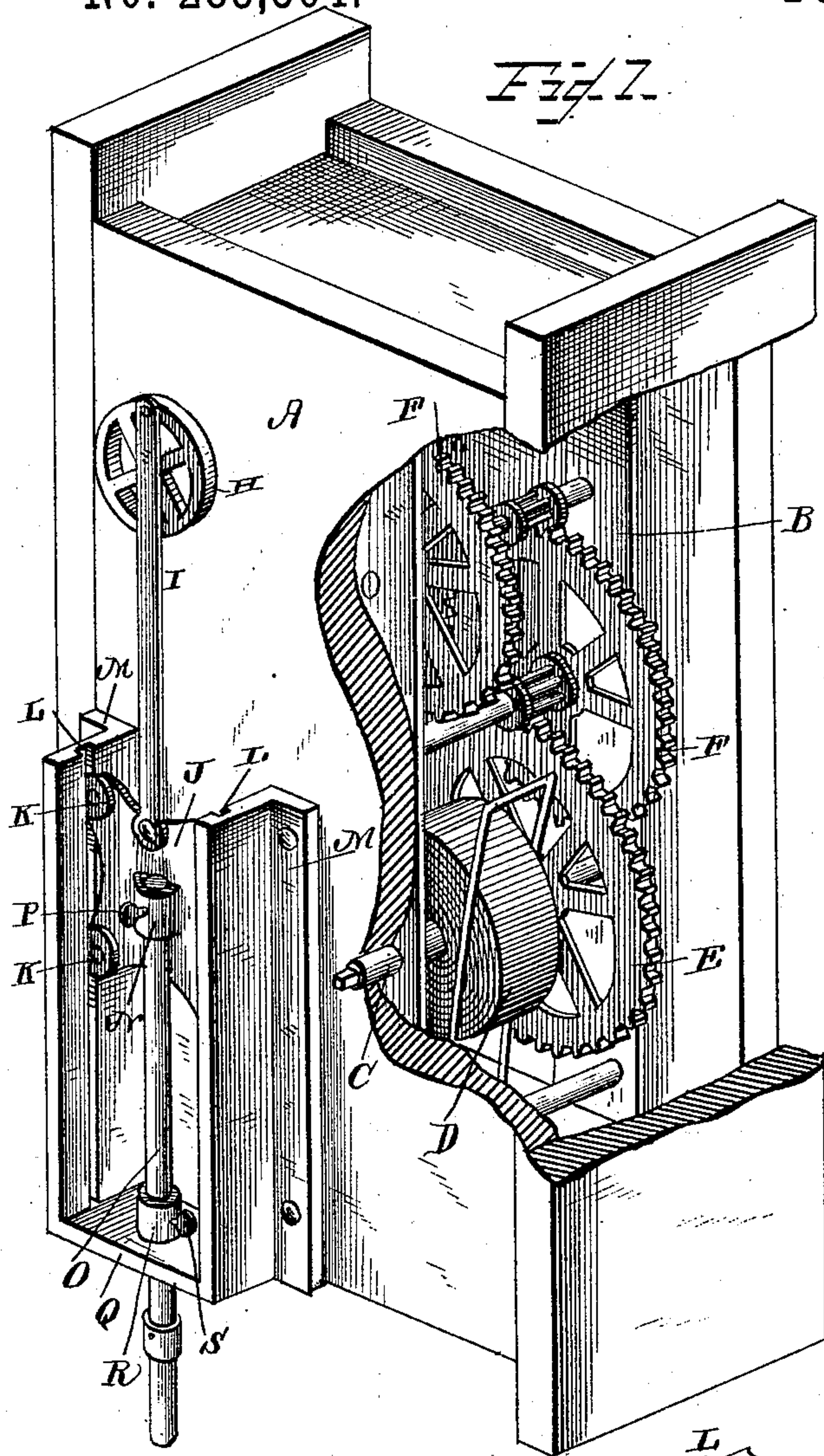
(No Model.)

W. H. O'BANNON & J. J. SNIDER.

CHURN MOTOR.

No. 285,504.

Patented Sept. 25, 1883.



WITNESSES  
F. L. Ourand  
E. G. Siggers.

William H. O'Bannon  
John J. Snider  
INVENTORS  
by C. A. Snow & Co.  
Attorneys



# UNITED STATES PATENT OFFICE.

WILLIAM H. O'BANNON AND JOHN J. SNIDER, OF CLEBURNE, TEXAS.

## CHURN MOTOR.

SPECIFICATION forming part of Letters Patent No. 285,504, dated September 25, 1883.

Application filed August 4, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM H. O'BANNON and JOHN J. SNIDER, citizens of the United States, residing at Cleburne, in the county of Johnson and State of Texas, have invented a new and useful Churn-Motor, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to motors for churns and other light machinery; and it consists in certain improvements in the construction of the same, having for their object to produce a machine which shall possess superior advantages in point of simplicity, durability, and general efficiency, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of our improved motor, part of the casing of the same having been broken away for the purpose of better showing the invention. Fig. 2 is a longitudinal vertical sectional view, and Fig. 3 is a detail view.

The same letters refer to the same parts in all the figures.

A designates a suitable casing, within which is secured the frame B of the operating mechanism.

C is the main shaft, upon which is wound the spring D, from which the power is derived. The main shaft carries the spur-wheel E, which is connected thereto by pawl-and-ratchet mechanism, and it is provided at one end, which projects through the casing A, with a suitable key or crank, by means of which it may be turned for the purpose of winding the spring.

A train of gears, F, conveys motion from the main shaft C to the operating-shaft G, one end of which projects through the casing A, as shown, and carries a wheel or disk, H. To the face of the latter is pivoted a pitman, I, the lower end of which is pivotally connected with a vertically-sliding plate or carriage, J. The latter is provided at its four corners with wheels or friction-rollers K, working in grooves L in the inner sides of the flanged guide-plates M M, which are secured vertically to the face of the casing A, thereby in-

sureing a steady and easy motion of the plate or carriage J. The face of the latter is provided with a struck-up loop, N, adapted to receive the upper end of the dasher-staff O of a churn, and having a set-screw, P, by means of which the said dasher-staff may be secured in position in the said loop.

The lower ends of the guide-flanges M M are connected by a flange or plate, Q, having a guide-collar, R, through which the upper end of the dasher-staff passes. Said collar is provided with a set-screw, S, which may be tightened against the said dasher-staff for the purpose of stopping the motion of the latter when it is desired to suspend or stop the operation of churning. The dasher-staff is composed of two pieces or sections suitably jointed or connected so that they may be readily taken apart when it desired to remove the churn after the completion of the operation. Suitable means may be employed for the purpose of retaining the churn-body in position during operation.

The operation of this invention will be readily understood. It is applicable to the operation of churns or any light machinery. It is simple, convenient, and inexpensive.

We claim as our invention and desire to secure by Letters Patent of the United States—

1. In a motor, the combination of the casing A, frame B, operating-shaft G, the spring-power for operating the said shaft, the wheel or disk at the front end of the operating-shaft, the guide-flanges M, secured vertically to the face of the casing A, and having grooves L in their inner sides, the plate or carriage J, having rollers at its four corners working in the grooves L, the pitman connecting said carriage with the face of the wheel at the front of the operating-shaft, and means for connecting the dasher of a churn with the said carriage, substantially as set forth.

2. The combination of the casing, the operating mechanism, the vertical guide-flanges grooved upon their inner sides, the plate or carriage having rollers at its four corners, and provided with a central struck-up loop having a set-screw, and the jointed dasher-staff secured in said loop by means of said set-screw, as set forth.

3. The combination of the casing, the operating mechanism, the vertical grooved guide-flanges, the plate or carriage having rollers at its four corners, and provided with a central  
5 struck-up loop having a set-screw, the jointed dasher-staff connected to said carriage, and a plate connecting the lower ends of the guide-flanges, and having a guide-collar for the dasher-staff, and a set-screw adapted to be tightened  
10 against the said dasher-staff for the purpose of stopping the motion, as set forth.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

WILLIAM H. O'BANNON.  
JOHN J. SNIDER.

Witnesses:

J. W. IRVIN,  
J. F. STROOP.