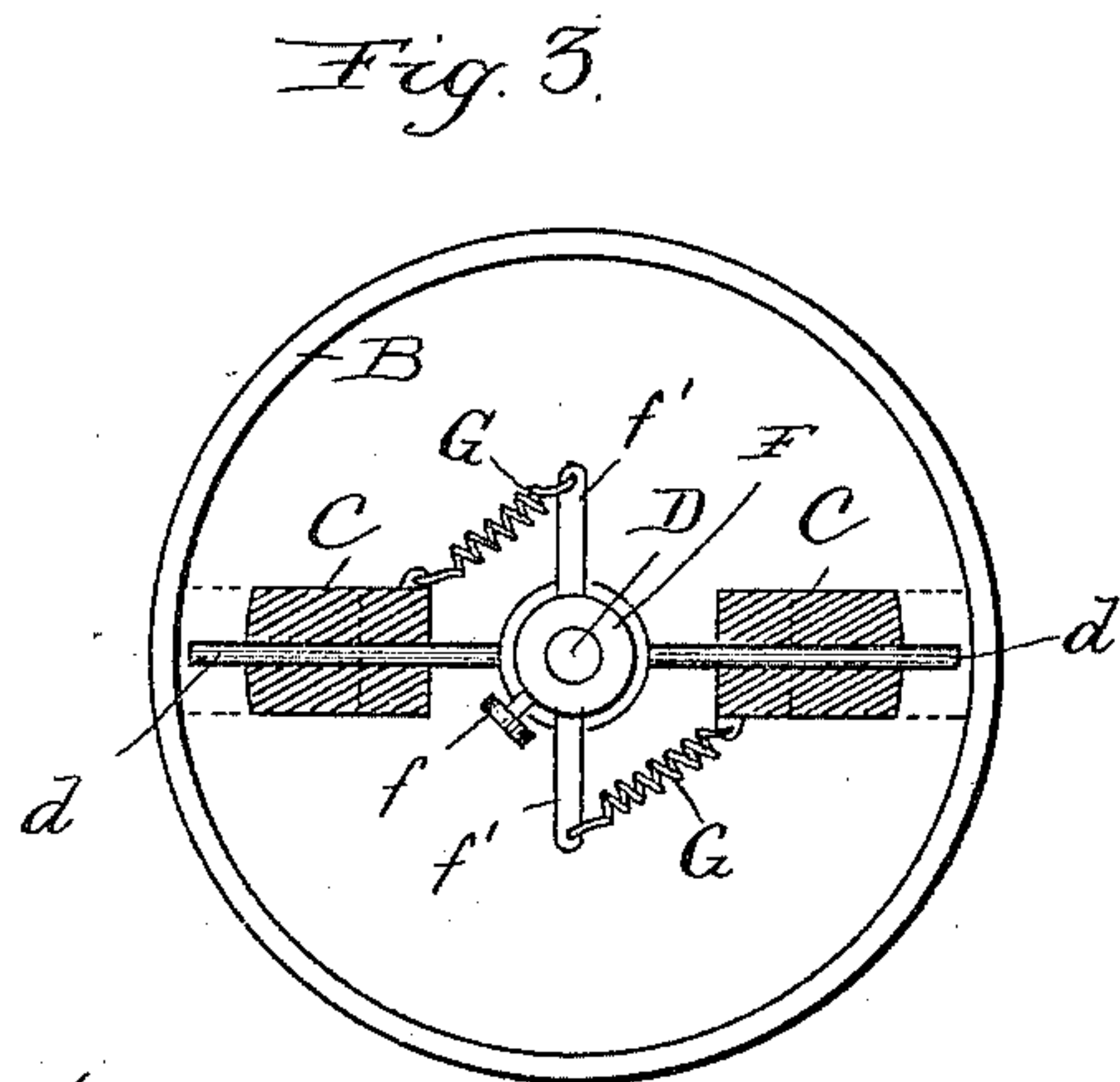
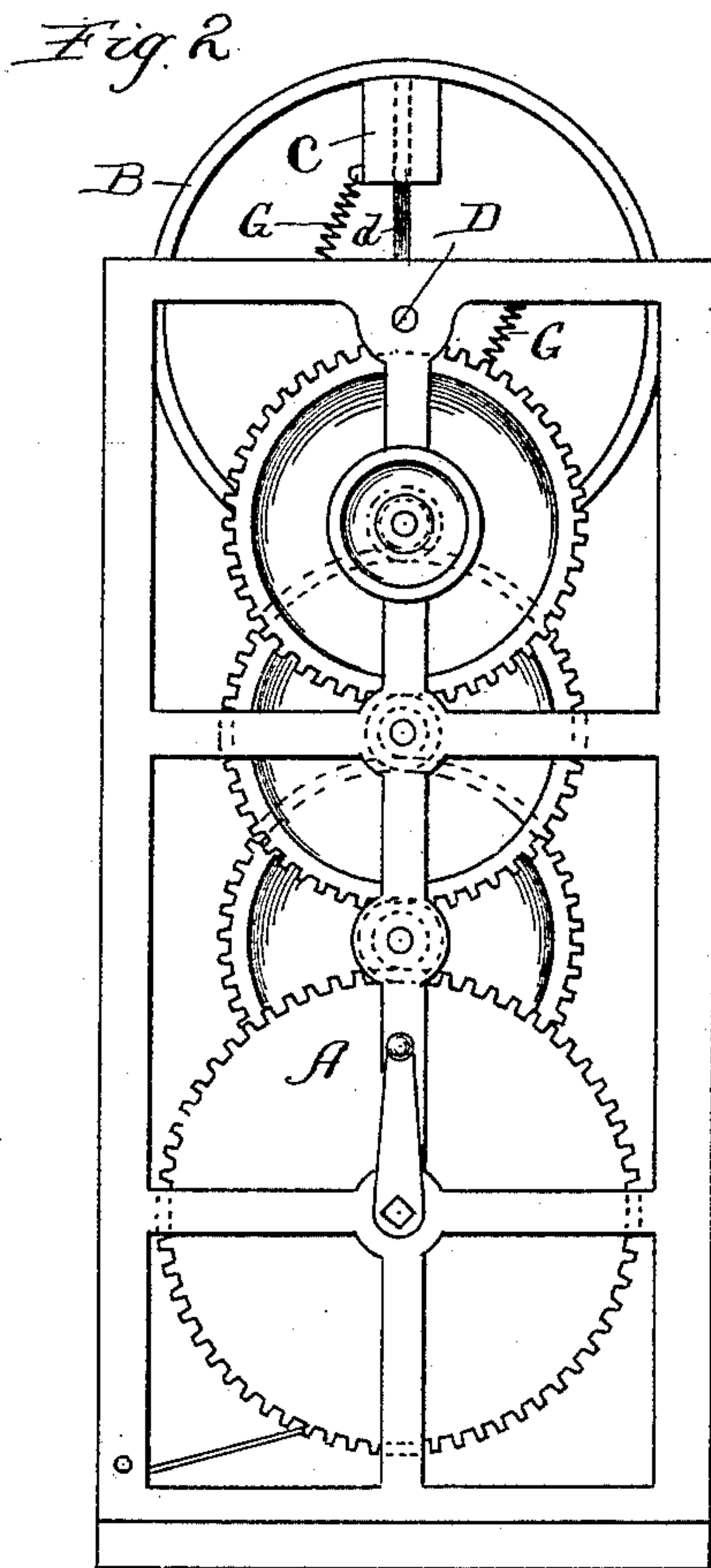
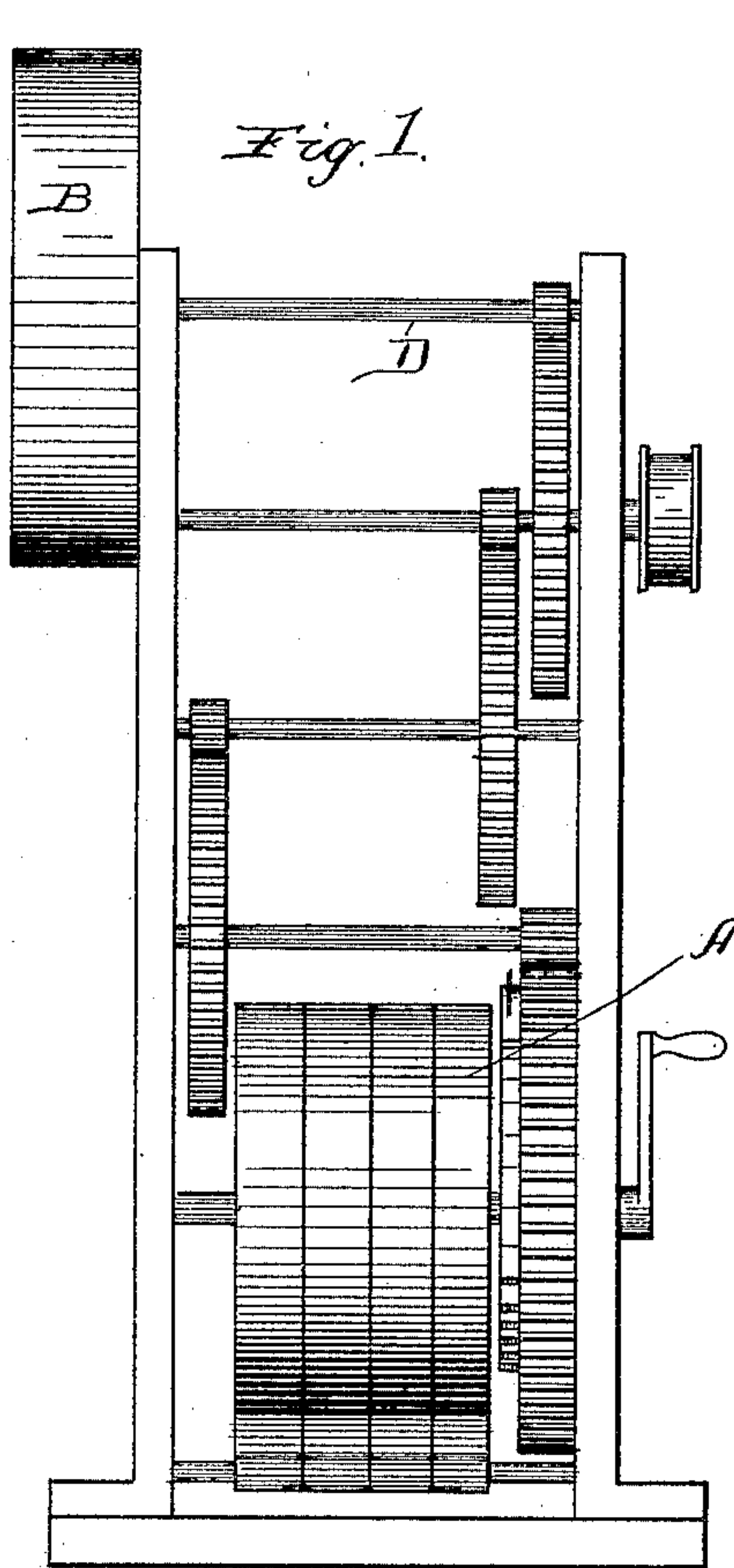


(No Model.)

E. H. AMET.
SPEED REGULATOR FOR MOTORS.

No. 462,228.

Patented Nov. 3, 1891.



Witnesses:

Sew. C. Curtis
A. W. Munday

Inventor:

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His Attorneys

UNITED STATES PATENT OFFICE.

EDWARD H. AMET, OF CHICAGO, ILLINOIS.

SPEED-REGULATOR FOR MOTORS.

SPECIFICATION forming part of Letters Patent No. 462,228, dated November 3, 1891.

Application filed January 28, 1891. Serial No. 379,356. (No model.)

To all whom it may concern:

Be it known that I, EDWARD H. AMET, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Speed-Regulators for Motors, of which the following is a specification.

My invention relates to devices for governing and rendering uniform the speed of spring or other mechanical motors.

The special object I have in view is to provide a device that will render absolutely uniform the speed of spring or other motors employed in operating phonographs to the end that the sounds may be reproduced accurately and truly in respect to intonation, &c. The means which I have discovered for accomplishing this result consist of radially-sliding blocks or weights carried by the revolving shaft of the motor in conjunction with a stationary rim, against which they are pressed by their centrifugal force with a greater or less pressure, according to the speed of the motor, thus increasing or diminishing the friction and thereby controlling the speed. The friction-blocks are mounted to slide upon radial arms projecting from the shaft. The sliding friction-blocks are provided with springs which counteract to a greater or less extent the centrifugal action of the revolving blocks, and the tension of which may be adjusted to enable the motor to run at any speed desired. The springs are preferably carried by or secured to projections or arms on a collar adjustably fixed or set to the shaft of the motor. The motor employed may be of any well-known or suitable construction.

In the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts, Figure 1 is a side elevation of a device embodying my invention. Fig. 2 is a front view, and Fig. 3 is a detail sectional view, illustrating the construction and operation of the regulator.

In the drawings, A represents the motor.

B is the stationary friction-rim, against which the radially-sliding friction-blocks C press by their centrifugal action as they revolve with the shaft D, by which they are carried. The shaft D is furnished with radially-

projecting arms or guides *d*, upon which the blocks C slide.

F is a collar adjustably fixed by a set-screw *f*, to the shaft D and having arms *f' f'* to which the ends of the counteracting-springs G G are secured. By loosening the set-screw *f* and turning the position of the collar F and its arms *f' f'* in respect to the friction-blocks C the tension of the springs may be increased or diminished, as desired. The friction-rim B is attached to the frame of the motor and supported thereby concentric with one of the revolving shafts of the motor—as, for example, D.

As the construction and operation of spring and other mechanical motors are well known to those skilled in the art, and as my invention is equally adapted to any well-known form of motor, it is not necessary to describe the construction and operation of the motor.

I have shown and described what I regard as the best method of actuating the balls or weights; but it is obvious that so long as they have the centrifugal action and are pressed thereby against the friction-rim that the construction of the devices whereby they are actuated is immaterial, and hence I do not wish to be limited to the special construction shown, except in those claims which are specifically laid to such construction.

I claim—

1. The combination, with a spring-motor, of the friction-rim B, revolving shaft D, driven by said motor and having arm *d*, sliding friction-block C, and a counteracting-spring secured at one end to said friction-block and at the other to an adjustable arm on said revolving shaft D, whereby the tension of said spring may be adjusted and the speed rate varied as desired, substantially as set forth.

2. The combination of revolving shaft D, having arms *d*, and provided with an adjustable collar F, having arms *f'*, sliding friction-blocks C, stationary friction-rim B, and springs G G, substantially as specified.

EDWARD H. AMET.

Witnesses:

H. M. MUNDAY,
EMMA HACK.