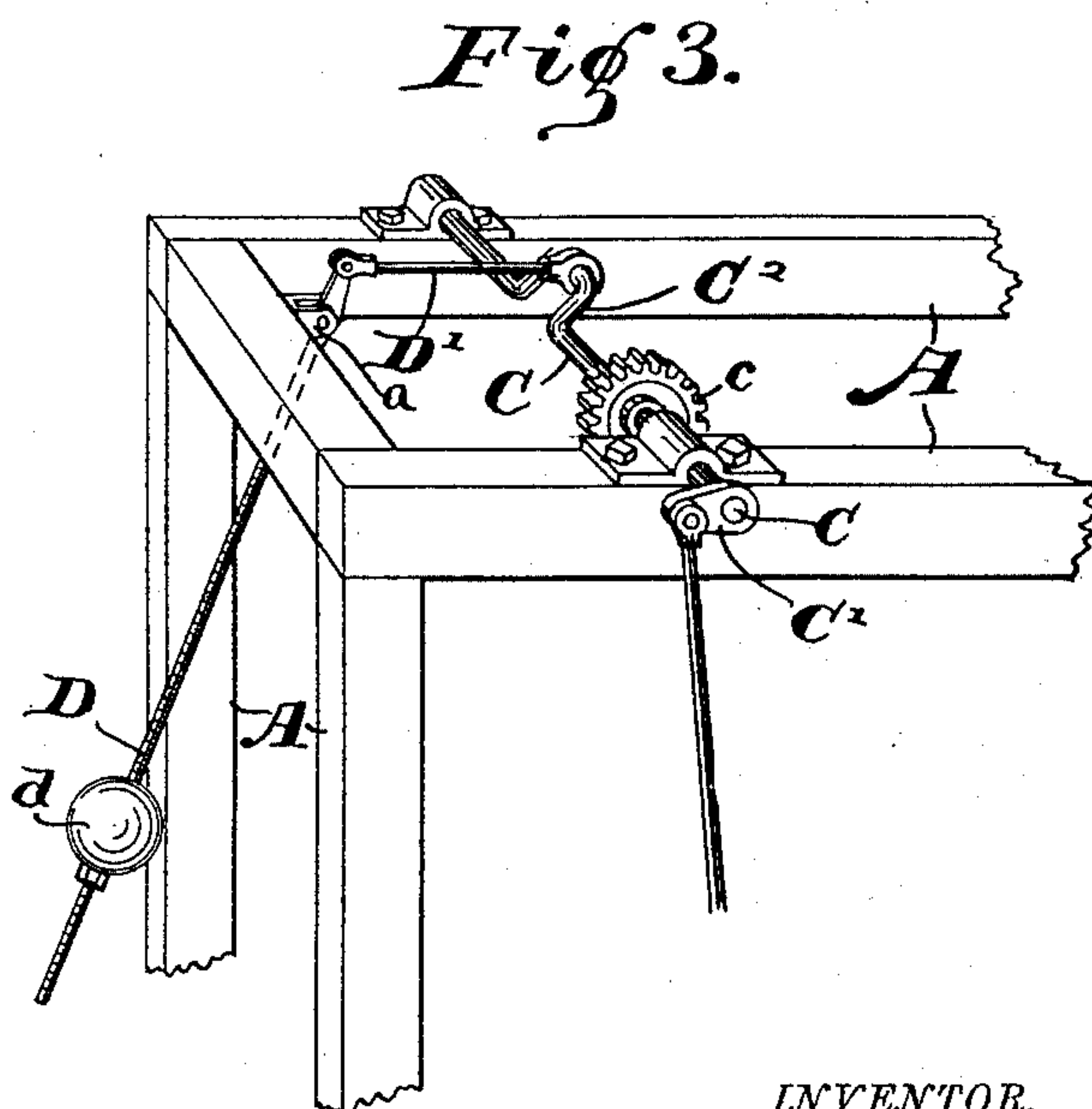
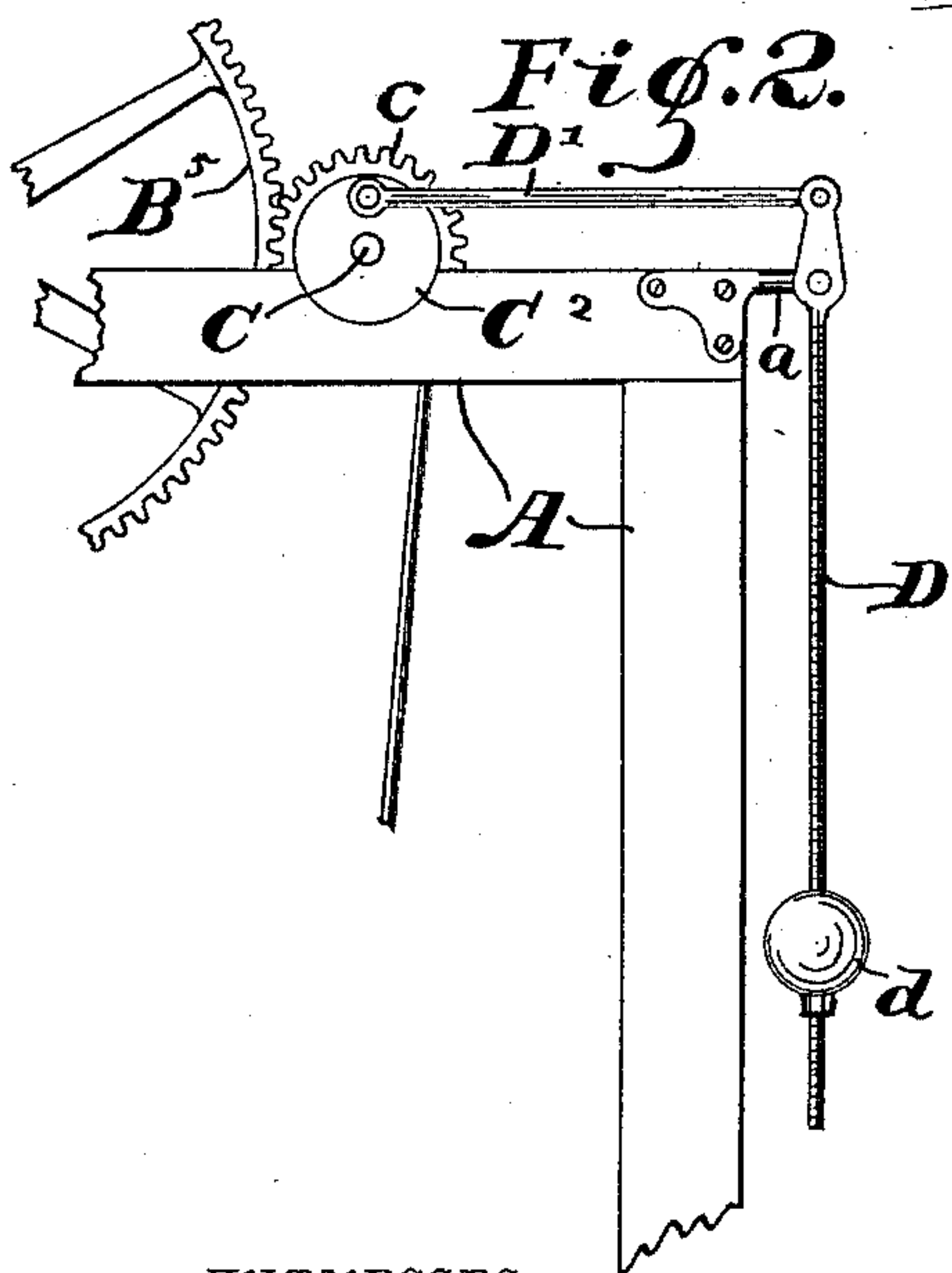
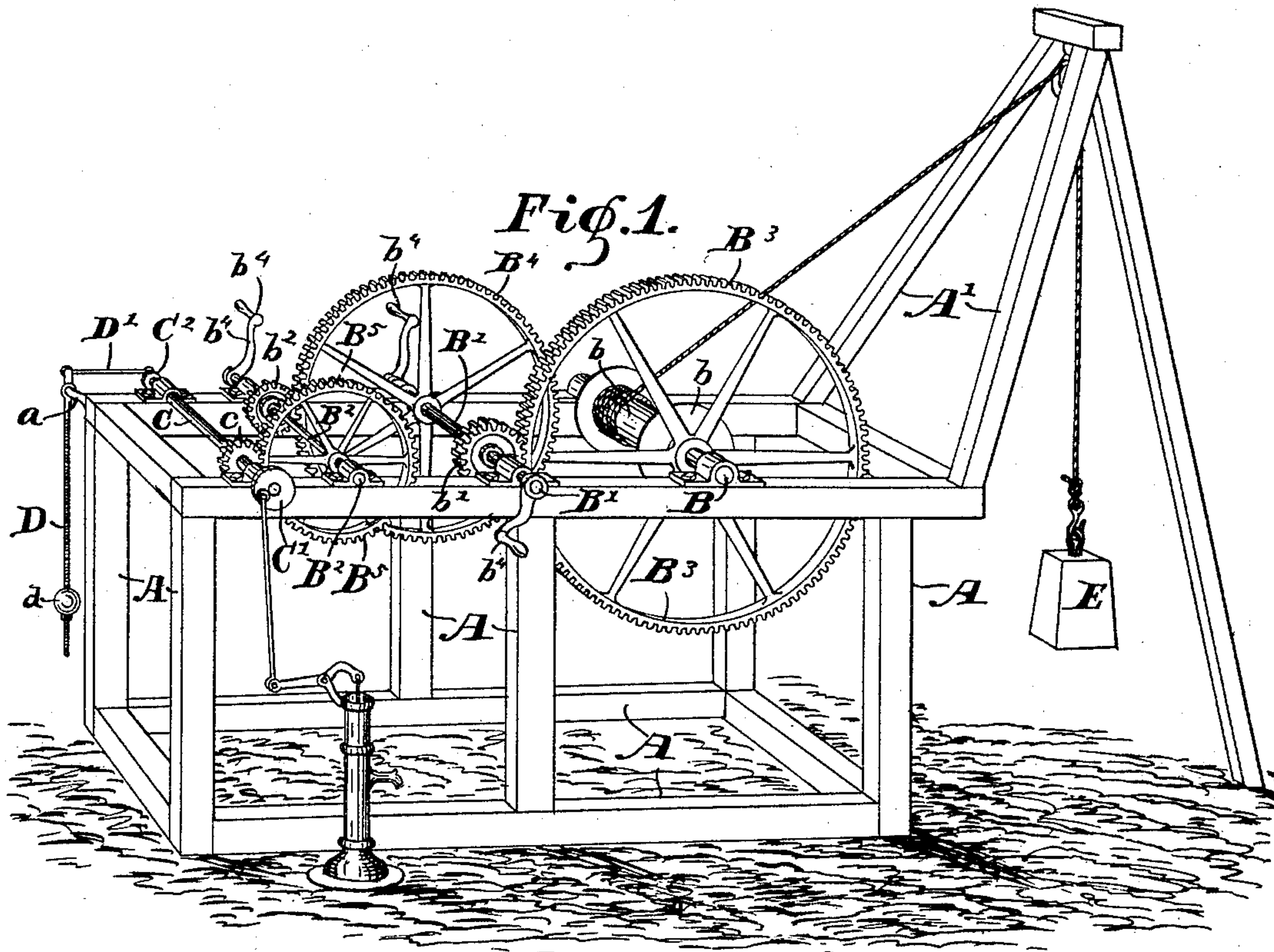


(No Model.)

M. F. TEAGUE.
ESCAPEMENT MOTOR.

No. 328,360.

Patented Oct. 13, 1885.



WITNESSES.

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UNITED STATES PATENT OFFICE.

MOSES F. TEAGUE, OF INDIANAPOLIS, INDIANA.

ESCAPEMENT-MOTOR.

SPECIFICATION forming part of Letters Patent No. 328,360, dated October 13, 1885.

Application filed August 29, 1885. Serial No. 175,636. (No model.)

To all whom it may concern:

Be it known that I, MOSES F. TEAGUE, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Escapement-Motors, of which the following is a specification.

The object of my said invention is to produce an improved construction of escapement-motors, especially in the arrangement and operation of the governor therefor, whereby an efficient and steady motor is provided, as will be hereinafter more particularly described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of my improved motor, illustrating its use; Fig. 2, a side elevation of one end of the same, showing the construction and arrangement of the governor on an enlarged scale; and Fig. 3 a view showing an alternate form of shaft which may be used in connection with said governor, if preferred.

In said drawings the portions marked A represent the frame-work of the motor; B B' B², shafts carrying cog-wheels B³ B⁴ B⁵, which constitute a chain of gear transmitting motion from the weight to the driving or operating shaft; C, said operating-shaft; D, the governor-pendulum, and E the weight.

The frame A is any suitable frame to support the mechanism, and preferably has an elevated portion, A', at its rear end, in the top of which is suspended a pulley-block, a, over which the weight-cord runs.

The shaft B is journaled in suitable bearings on the frame, and has a drum, b, for the weight-cord thereon. The shafts B' and B² are each journaled in appropriate bearings, and have small gear-wheels b' and b², respectively, thereon, with which the large gear-wheels B³ and B⁴ mesh, thus forming a complete train of gear transmitting the motion from the shaft B to the shaft B² and gear-wheel B⁵ thereon.

The shaft C is preferably a straight shaft journaled in bearings on the frame-work, and having a small gear-wheel, c, thereon, which meshes with the wheel B⁵, whereby said shaft is driven. On one end it is provided with a crank-wheel, C', which is connected by a pitman-rod in the usual manner to the pump-

handle, as shown, or whatever machinery it is desired to operate. On the other end it is provided with another crank-wheel, C², which is connected with the pendulum, as will be presently described.

The governor-pendulum D is in main of an ordinary construction, the weight d on its lower end being adjustably mounted. Near its top it is pivoted on a projecting pin, a', on the corner of the frame-work, as shown. Said top is extended up a short distance above said pivot, and it is provided with a projecting pivot, d', which has one end of the connecting-rod D' journaled thereon, the other end of said rod being journaled on the crank-pin c², on the crank-wheel C², thus connecting said pendulum with the operating-shaft. In the alternate construction shown I form the shaft C with a crank therein, with which the pendulum is connected, instead of having the crank-wheel C² on its end. The operation is, however, identical with the other, the construction to use being only a matter of preference, as will be readily seen.

The weight E is hung by a cord, E', which passes up over the pulley a in the top of the frame A', and down to the drum b, to which it is connected. It is sufficiently heavy to give the required power to the motor, and of course may be of any convenient or desired substance. Cranks b⁴ may be provided, as shown, on one or more of the shafts, by which said weight may be raised after having "run down."

The operation of my invention is as follows: Motion is transmitted to the operating-shaft C through the train of gear driven by the weight in the well-known manner, which, through the crank-wheel C', drives the pitman-rod and the machinery desired. Said shaft being in motion, also operates the crank-wheel C², which, through the connecting-rod D', operates the pendulum, the resistance of which operates to steady the motion and govern the speed of the motor. When greater speed is desired, the weight on the end of said pendulum is raised by turning up the nut which secures it thereon, and when less speed is desired said weight is lowered, thus diminishing or increasing the resistance of the governor, as will be readily understood.

Having thus fully described my said inven-

tion, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the train of driving-gear and operating-shaft of an escapement-motor, of a governor consisting of a crank-wheel on one end of said operating-shaft, a pendulum pivoted on the frame, and a connecting-rod connecting said pendulum to said crank-wheel, substantially as set forth.
2. The combination, with the train of driving-gear and operating-shaft of an escapement-motor, of a governor consisting of a crank-wheel on one end of said driving-shaft, a pendulum pivoted near its top on the frame-work, and a connecting-rod connecting said pendulum at a point above said pivot to the crank-pin on said crank-wheel, whereby the speed of said shaft is automatically controlled, substantially as set forth.

3. The combination of the chain of gear consisting of the shafts B B' B², gear-wheels B³ B⁴ B⁵, b' and b², the operating-shaft C, having a gear-wheel, c, which meshes with said wheel B⁵, the crank-wheel C', crank-wheel C², pendulum D, pivoted to the frame-work, connecting-rod D', connecting the top of said pendulum to said crank-wheel C², and the weight E, for driving the same, all substantially as described, and for the purposes specified.

In witness whereof I have hereunto set my hand and seal, at Dayton, Ohio, this 6th day of August, A. D. 1885.

MOSES F. TEAGUE. [L. S.]

In presence of—

S. B. ROHRER,
THOS. MCGREGOR.