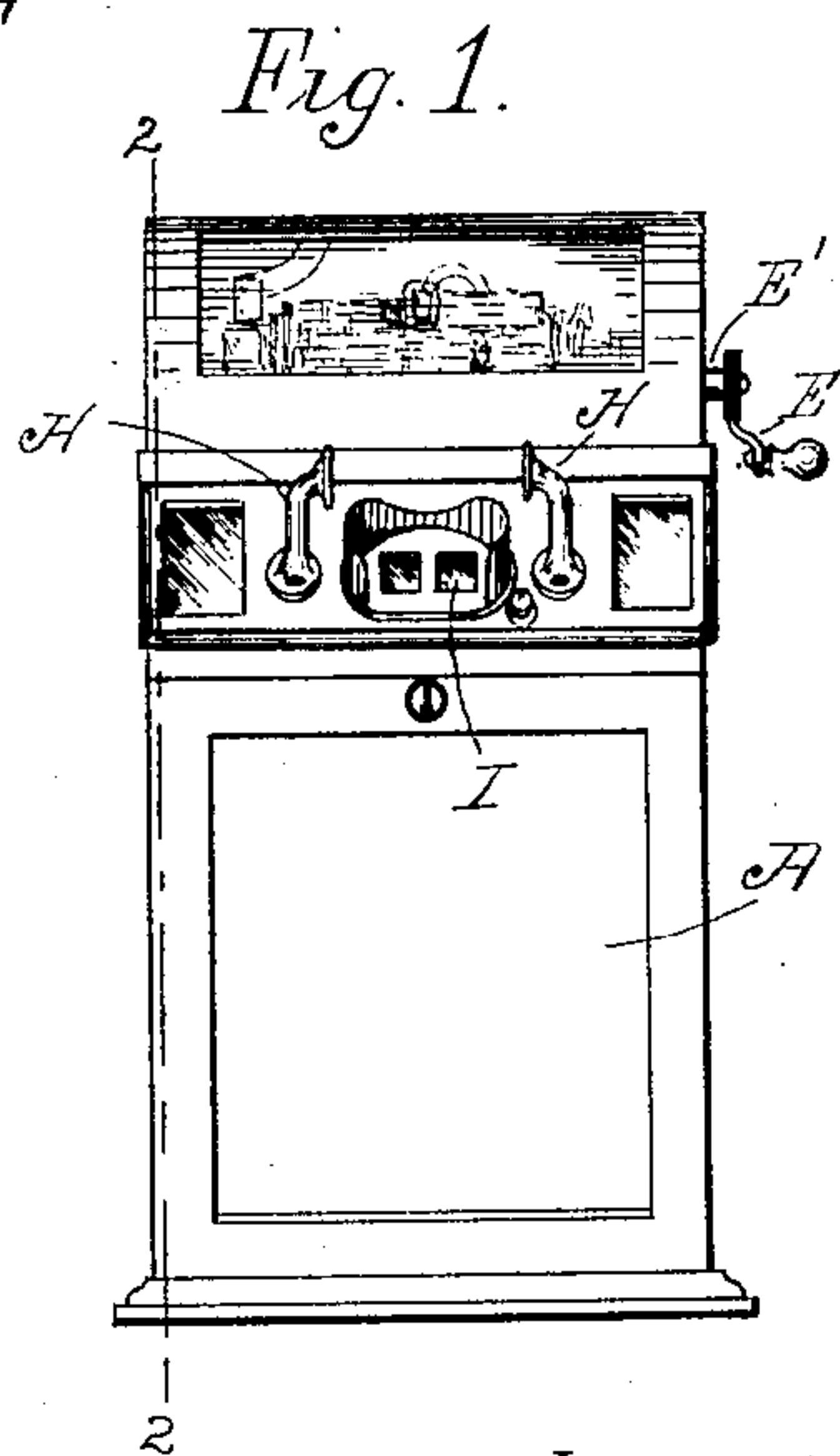
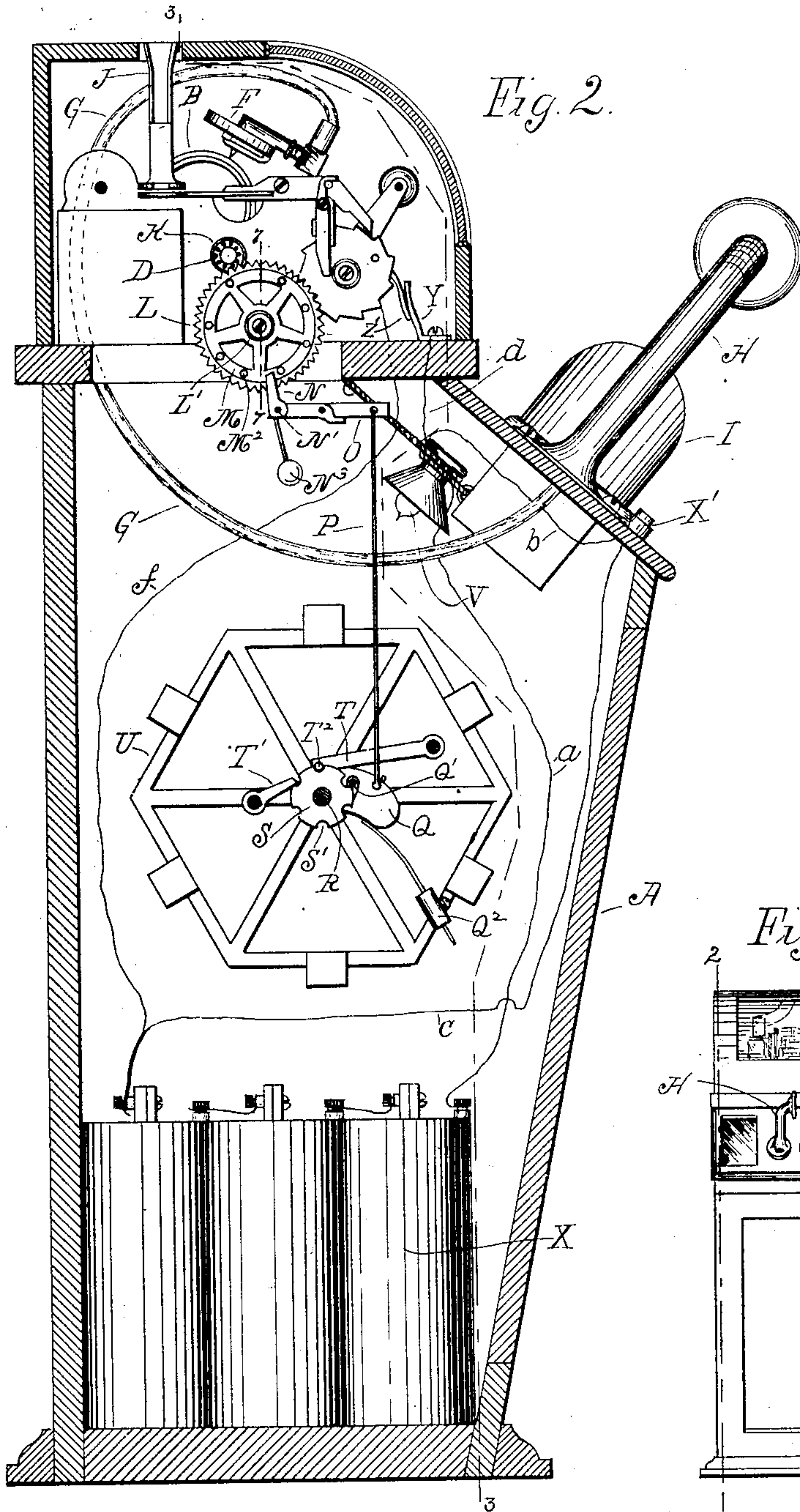


E. A. REEVES.
PICTURE EXHIBITOR.

(Application filed Apr. 25, 1899.)

(No Model.)

3 Sheets—Sheet 1.



Witnesses.

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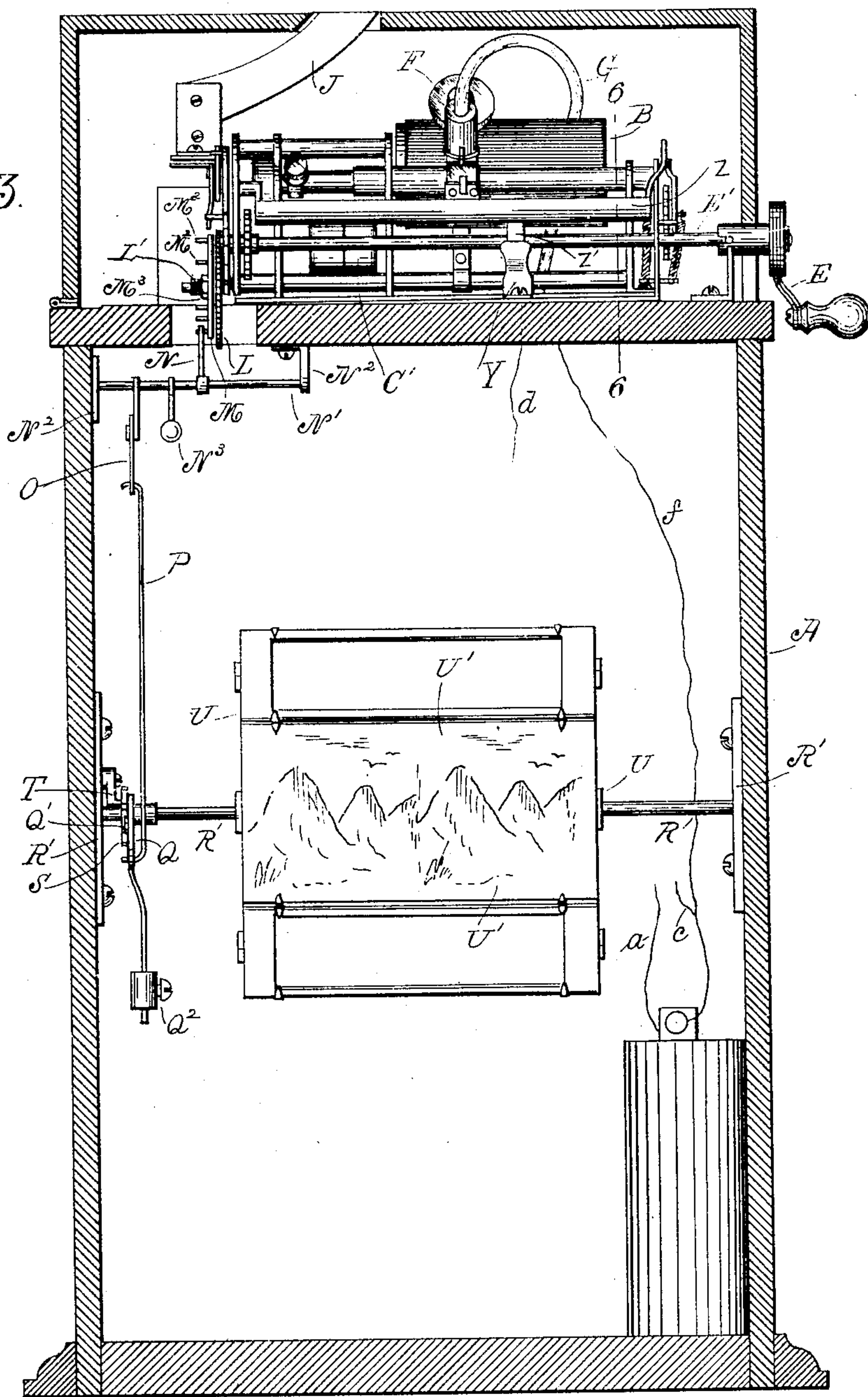
E. A. REEVES.
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(Application filed Apr. 25, 1899.)

(No Model.)

3 Sheets—Sheet 2.

Fig. 3.



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E. A. REEVES.
PICTURE EXHIBITOR.

(Application filed Apr. 25, 1899.)

(No Model.)

3 Sheets—Sheet 3

Fig. 4.

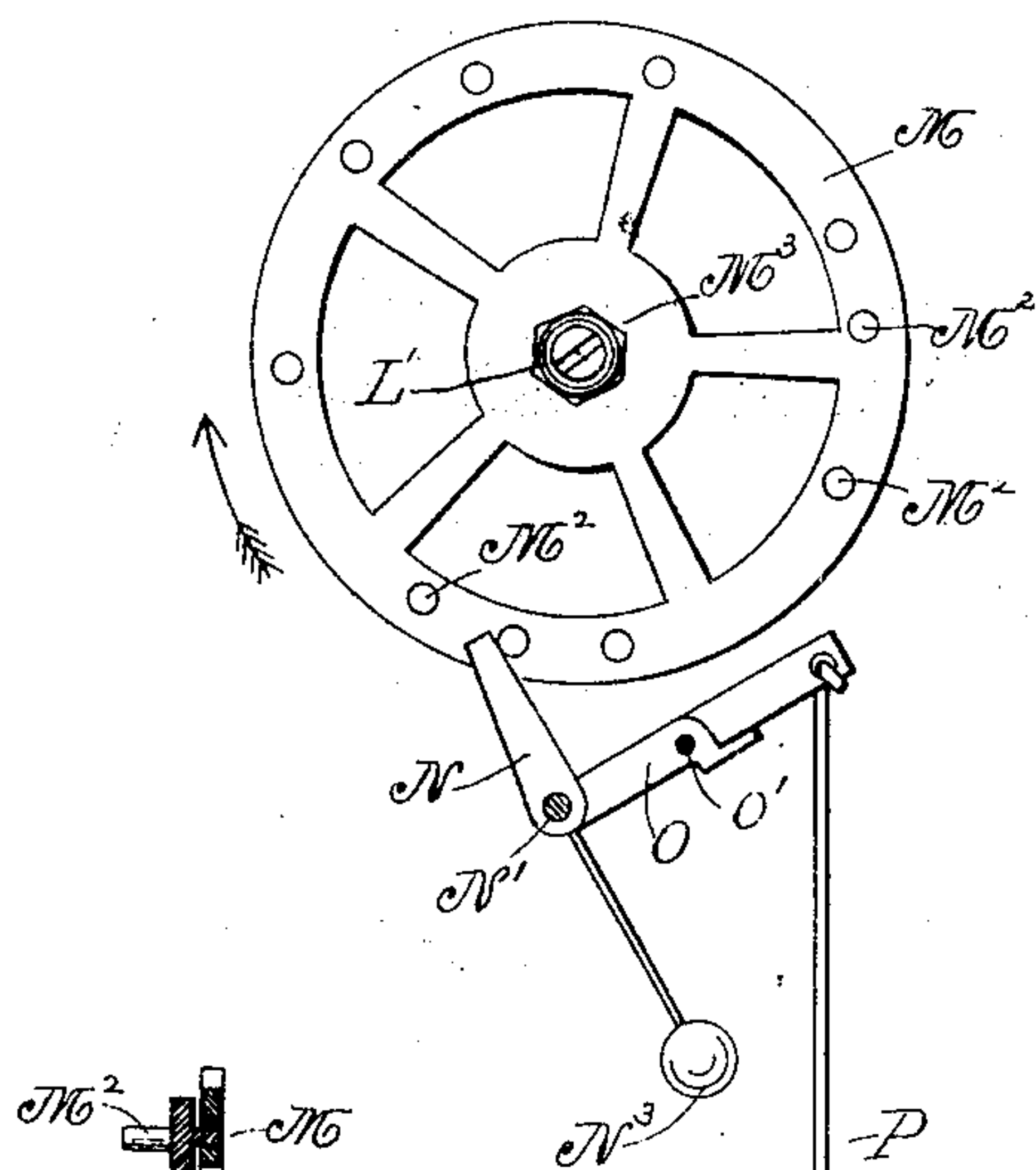


Fig. 5.

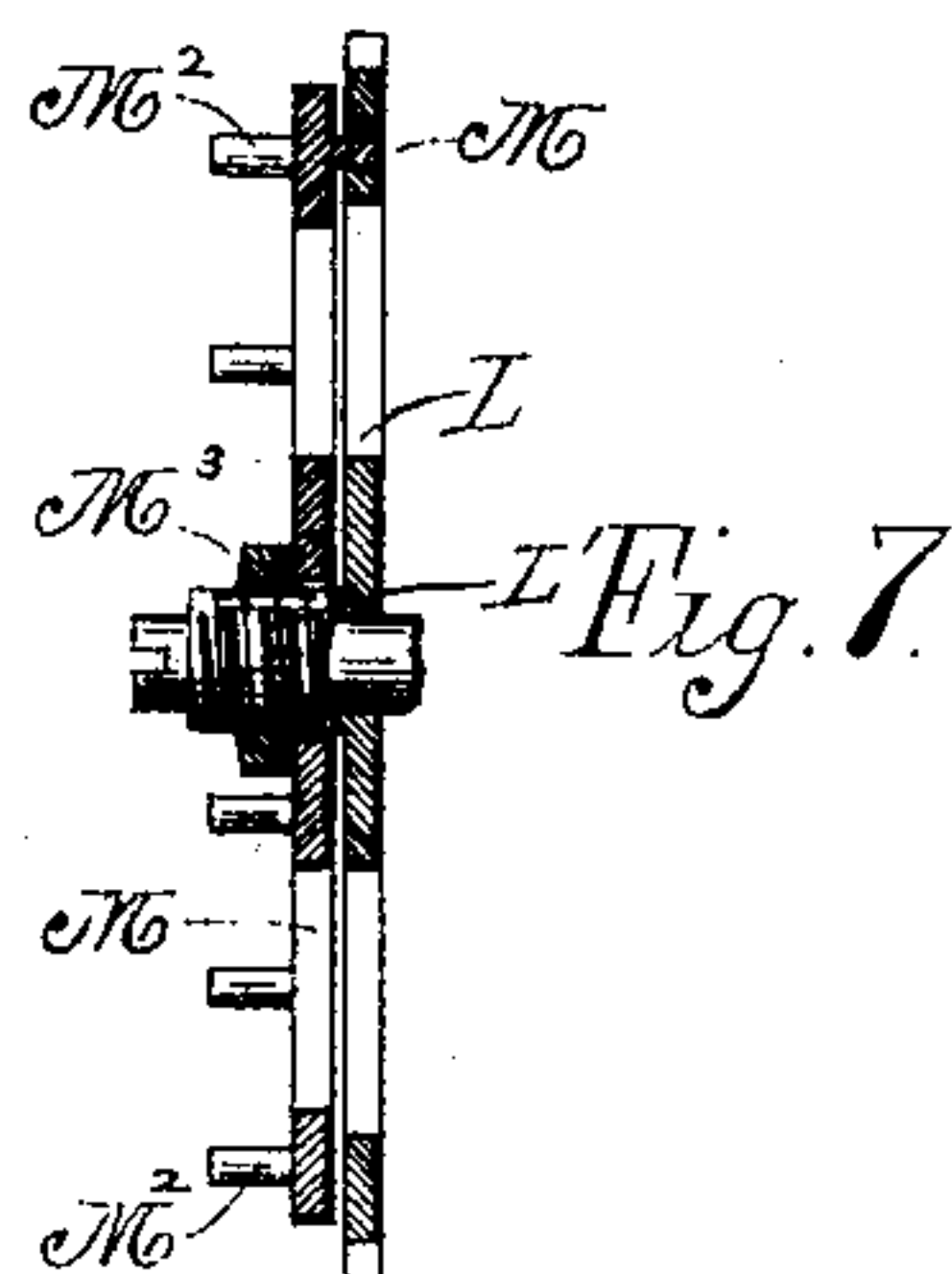
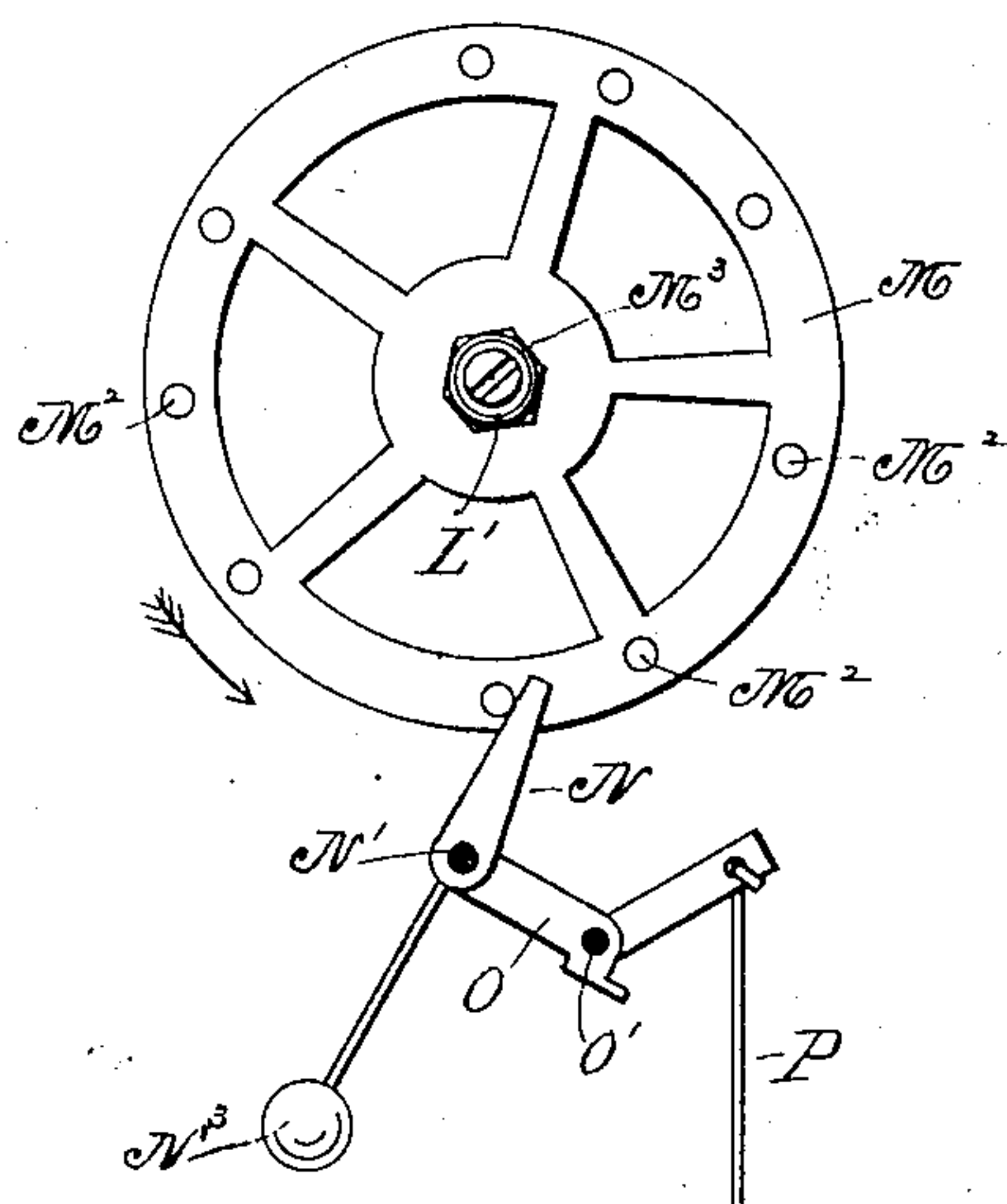
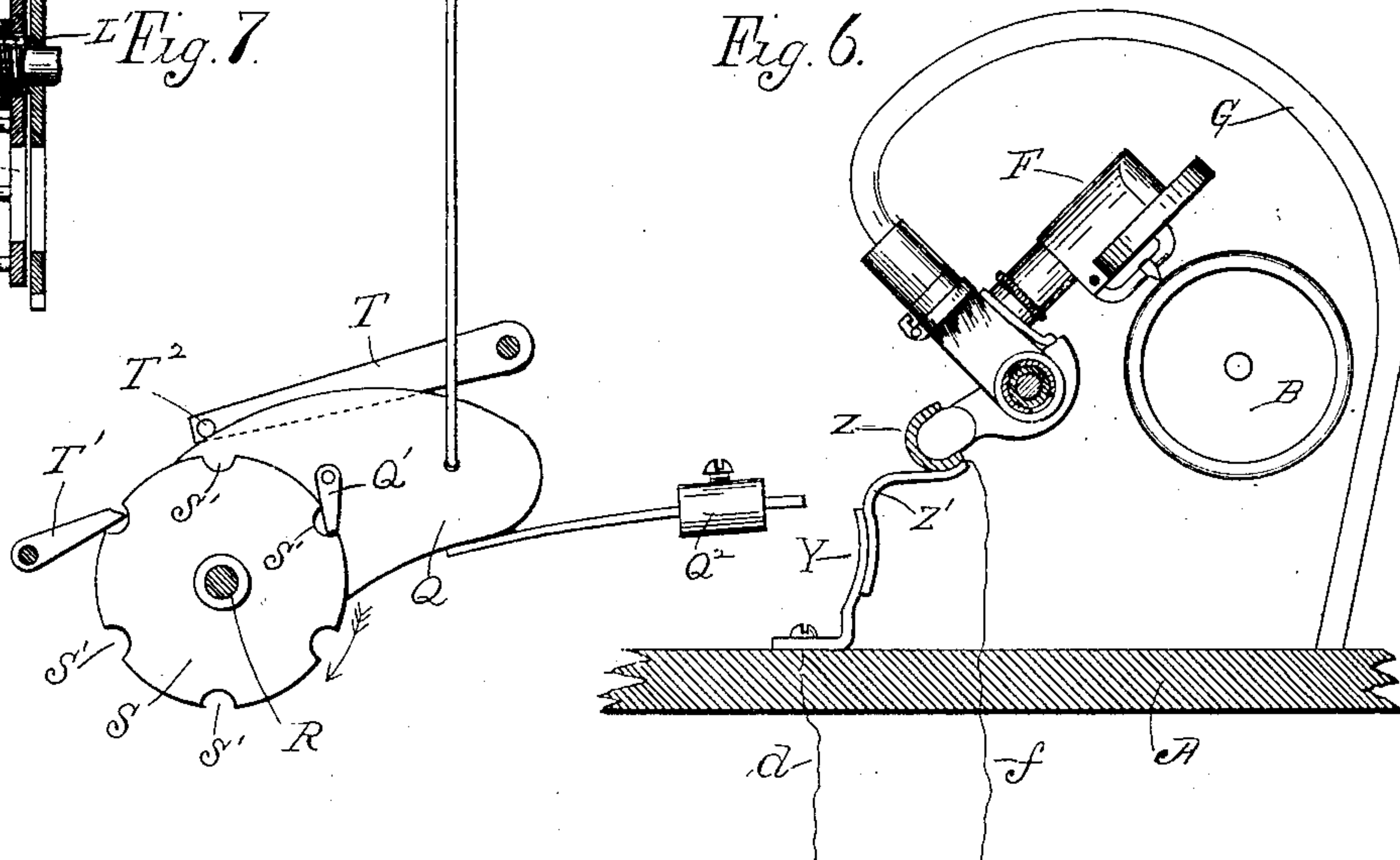


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

EDWIN A. REEVES, OF NEW HAVEN, CONNECTICUT.

PICTURE-EXHIBITOR.

SPECIFICATION forming part of Letters Patent No. 662,820, dated November 27, 1900.

Application filed April 25, 1899. Serial No. 714,443. (No model.)

To all whom it may concern:

Be it known that I, EDWIN A. REEVES, of the city of New Haven, county of New Haven, and State of Connecticut, have invented a new and useful Improvement in Picture-Exhibitors, of which the following is a full, clear, and exact description when taken in connection with the accompanying drawings, which form a part thereof, and in which—

10 Figure 1 represents a front elevation of a coin-controlled apparatus embodying my invention; Fig. 2, a vertical section on lines 2 2 of Fig. 1; Fig. 3, a vertical section on lines 3 3 of Fig. 2; Figs. 4 and 5, enlarged detail views of some of the parts for rotating the shaft of the picture-exhibitor and devices for tripping the same in different positions; Fig. 6, a vertical section on lines 6 6 of Fig. 3; Fig. 7, an enlarged vertical section through the disk and gear on lines 7 7 of Fig. 2.

In all the figures similar letters of reference represent like parts.

This invention relates to coin-controlled apparatus, and more particularly to that class of coin-controlled apparatus wherein upon the insertion of the proper coin a mechanical reproduction of a song or other sounds is accompanied by the exhibition of suitable illustrations.

30 The invention has for its object the production of an apparatus of this character with certain novel improvements and combinations, as set forth and claimed hereinafter.

In Fig. 1 of the drawings the box or case inclosing the apparatus is shown by the parts marked with the letter A. Within the upper part of the case is a sound-reproducing machine, which may be of any practical construction, but in this case is shown as a graphophone having a cylinder B, which is driven by a spring-motor inclosed in a metal case mounted on the driving-shaft D. The motor is wound by means of the crank-arm E and rod E', projecting from the side of the box or case. The reproducer is shown at F and the tube connected therewith at G, which tube passes, as shown in Fig. 2, from the reproducer F into the interior of the lower portion of the box or case, where it may be connected to horns H, mounted on either side of a light-shield I for a lens in the front of the case.

J represents the usual slot for the deposit

of the coin which permits the operation of the graphophone, the details of which are omitted, as any well-known type may be used. 55

On the outer end of one of the shafts, as the main driving-shaft D, is a small gear K, meshing with a larger gear L. On a bushing L' of the gear L is loosely mounted a disk M, which is provided with any suitable means for keying it to the gear L to rotate therewith, while a nut M³ holds it in place. A series of pins or lugs M² are provided on the outer side of the disk M, properly distanced to strike at the desired intervals a tripping-lever N, rigidly mounted on a shaft N', journaled to rotate in bearings N² in the upper portion of the box or case. A suitable weight N³ is carried by the tripping-lever N to restore it to its normal position. Also rigidly mounted on the shaft N' is an elbow-lever O, the two parts of which are pivoted at O' and adapted to act as a ratchet-joint, being only capable of breaking in one direction when the disk is turned in the direction indicated by the arrow, Fig. 5. To the outer end of the lever O is attached a connecting-rod P, which is connected to a cam or lever Q, loosely mounted on a rotary shaft R, journaled in suitable bearings R' on the sides of the box or casing A. Rigidly mounted on the shaft R is a ratchet-wheel S, having teeth or notches S' for engagement by two oppositely-disposed pawls T and T'. Another pawl Q' is pivoted on the cam Q, which is further provided with a weight Q² to constantly draw it downward. Two hexagonal wheels U are rigidly mounted on the shaft R, carrying photographs or other illustrations U', arranged to come successively into alignment with the lens I upon the rotating of the wheels U. 60 65 70 75 80 85 90

The operation of the device is as follows: When the coin is deposited in the slot J and the crank-arm turned to wind the graphophone, the pins M² on the disk M strike and trip the lever N, as shown in Fig. 5, and the lever O is broken, as shown, so that the associated parts, the connecting-rod P, cam Q, and ratchet S, are undisturbed. When the graphophone begins to operate, the shaft D rotates the gear K, which in turn drives the gear L and the disk M in the opposite direction, (indicated by the arrow, Fig. 4.) 95 100

Upon the rotation of the disk M a pin M^2 will strike and trip the lever N, (the pin having been placed so that the tripping will occur at the proper moment in the operation of the graphophone.) The lever N being tripped, rotates the shaft N' and raises the outer end of the elbow-lever O, so that the connecting-rod P will raise the outer end of the cam or lever Q. This cam or lever Q is adapted upon being so raised to strike the pin T^2 in the pawl T and disengage the same from the notch S' of the ratchet S, Fig. 4. At the same time the pawl Q' engages another tooth or notch of the ratchet S, and when the tripping-lever N is released from the pin M^2 the weight Q^2 will carry the cam or lever Q downward, and the pawl Q' being engaged with the ratchet S and the pawl T being disengaged the ratchet will be rotated in the direction of the arrow, Fig. 4. The rotation of the ratchet S rotates the shaft R and the wheels U, so that a new picture or illustration is presented to the lens. The pins M^2 are placed at such intervals on the disk M that the rotation of the shaft R and the exhibition of a new picture will take place at the desired moment in relation to the operation of the phonograph. By this spacing of the pins one picture may be exhibited longer than another, if desired, and therefore a longer portion of the recitation or music on the cylinder of the phonograph may be produced while one picture is before the eye of the spectator than while another is in view.

An electric light V is shown for illuminating the pictures or illustrations, which light has an electrical connection a with a battery X and a connection b with a press-button X' of ordinary construction, a third wire c running from the press-button to the battery X. A wire d connects the light with a terminal Y, consisting of a spring-plate, in the upper portion of the box or casing. Over the outer end of the reproducer F is a curved plate Z, covering a spring (not shown) for returning the reproducer, and to this plate is attached a metal strip Z' , which forms the other terminal. The two terminals Y and Z' are adapted to come into contact when the reproducer F rests on or is in operative contact with the cylinder B; but when the reproducer is swung away from the cylinder and the graphophone therefore not in operation the terminal Z' is swung away from the terminal Y, for the curved plate Z and strip Z' rotate with the reproducer F in well-known manner. A wire f from the plate Z to the battery completes the circuit when the graphophone is in operation, while by means of the press-button the light may be operated at will.

Having now described my invention, the details of which may vary without departing from the spirit thereof, what I claim, and desire to secure by Letters Patent, is—

1. The combination with a picture-exhibitor consisting of a rotary shaft having mounted thereon a series of illustrations and mech-

anism for rotating said shaft; of a sound-reproducing machine having a rotary shaft carrying a tripping device adapted, upon the operation of said sound-reproducing machine, to engage said mechanism, said mechanism being adapted, upon disengagement from said tripping device, to rotate said shaft of said exhibitor, substantially as described.

2. The combination with a picture-exhibitor consisting of a rotary shaft having mounted thereon a series of illustrations and mechanism for rotating said shaft; of a sound-reproducing machine having a rotary shaft carrying a series of tripping devices adapted upon the operation of said sound-reproducing machine to successively engage said mechanism, said mechanism being adapted upon disengagement from each of said tripping devices, to partially rotate said shaft of said exhibitor, substantially as described.

3. The combination with a picture-exhibitor consisting of a rotary shaft, having a series of illustrations mounted thereon, and mechanism for rotating said shaft; of a sound-reproducing machine, having a rotary shaft carrying a series of tripping devices irregularly spaced from each other, which upon the operation of said sound-reproducing machine successively engage said mechanism, said mechanism being adapted, upon disengagement from each of said tripping devices to partially rotate said shaft of said exhibitor, substantially as described.

4. The combination with a picture-exhibitor consisting of a rotary shaft, having a series of illustrations mounted thereon, a weighted lever having a pawl-and-ratchet engagement with said shaft and mechanism for raising said weighted lever; of a sound-reproducing machine having a rotary shaft carrying a series of tripping devices adapted upon the operation of said sound-reproducing machine to successively engage said mechanism, said mechanism upon disengagement from said tripping devices permitting the fall of said weighted lever, substantially as described.

5. The combination with a picture-exhibitor consisting of a rotary shaft having a series of illustrations mounted thereon, a weighted lever having a pawl-and-ratchet engagement with said shaft, and a supplementary lever for raising said weighted lever; of a sound-reproducing machine having a rotary shaft carrying a disk, with a series of trips adapted upon the operation of said sound-reproducing machine to successively engage said supplementary lever, said lever upon disengagement from each of said trips permitting the weighted lever through its pawl-and-ratchet connection to partially rotate said shaft of said exhibitor, substantially as described.

6. The combination with a picture-exhibitor consisting of a rotary shaft having a series of illustrations mounted thereon and mechanism for rotating said shaft; of a sound-

reproducing machine having a rotary shaft carrying a series of trips; and a lever having a rule-joint, adapted upon the rotation of said shaft of said sound-reproducing machine to
5 be engaged by said trips, and when so engaged in one direction said lever being bent at said joint, and in the opposite direction said lever engaging and operating said mechanism, substantially as described.

10 7. The combination with a picture-exhibitor consisting of a rotary shaft having a series of illustrations mounted thereon and mechanism for rotating said shaft; of a sound-reproducing machine, having a record and
15 pivoted reproducer; an electric light for illuminating said illustrations, one terminal of the circuit of said light being fixed, and the other terminal pivoted to swing simultaneously with said reproducer, said pivoted terminal being adapted to be swung into contact with said fixed terminal, when said reproducer is in operative contact with said rec-

ord, and mechanisms for operating said sound-reproducing machine and picture-exhibitor in timed relation with each other, substantially as described. 25

8. In a picture-exhibitor the combination with a rotary shaft having a series of illustrations mounted thereon; a ratchet-wheel rigidly mounted on said shaft; a weighted
30 lever carrying a pawl for engagement with said ratchet; a disk provided with one or more lateral pins; a tripping-lever tripped by said pins, and connected to said weighted lever to raise the same to engage said ratchet, 35 and mechanism for rotating said disk, substantially as described.

In witness whereof I have hereunto set my hand this 20th day of April, A. D. 1899.

EDWIN A. REEVES.

Witnesses:

SAMUEL H. FISH,
JOHN K. BEACH.