

(No Model.)

C. E. PATTERSON.

AUTOMATIC PICTURE EXHIBITOR.

No. 399,553.

Patented Mar. 12, 1889.

Fig. 1.

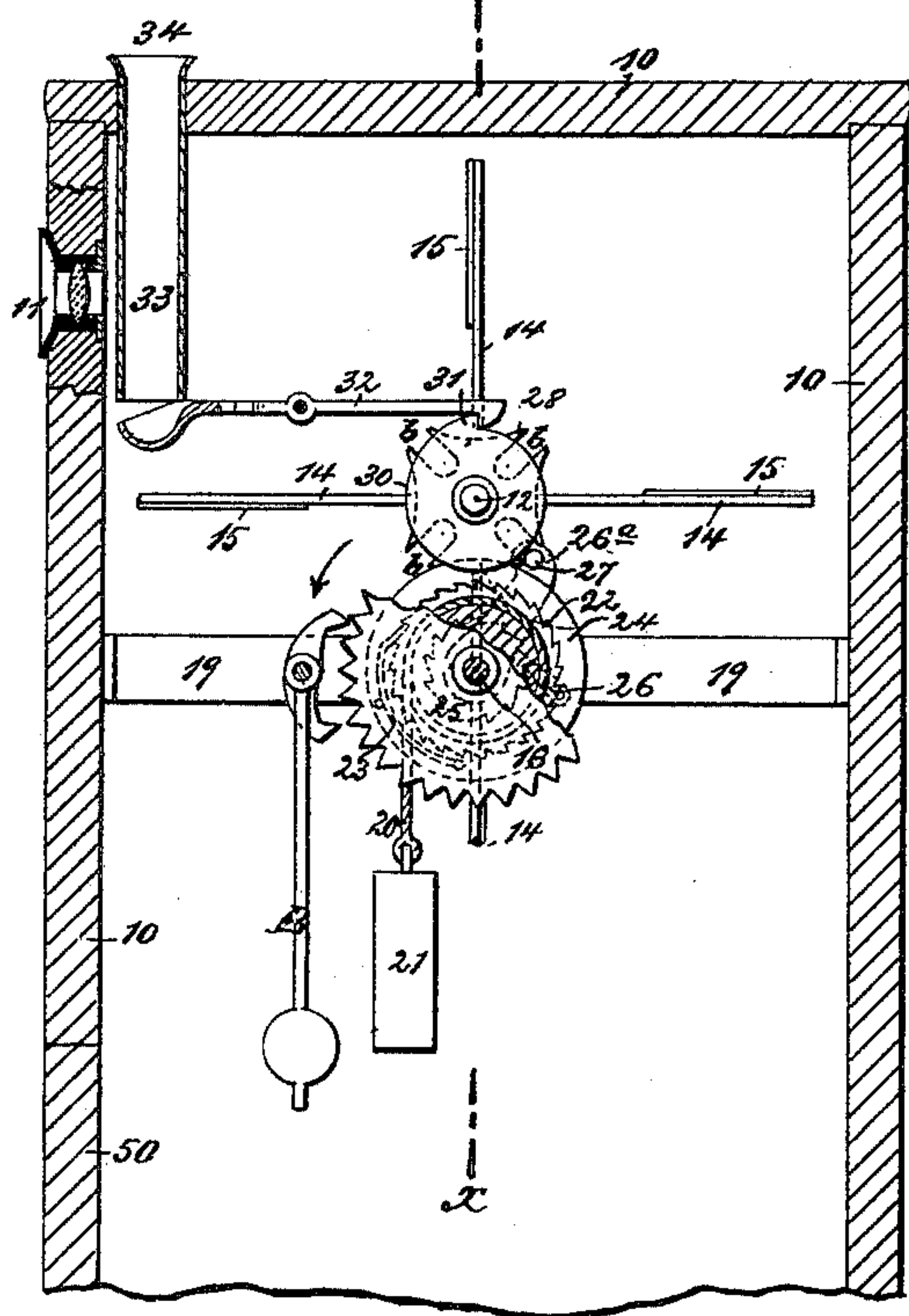


Fig. 2.

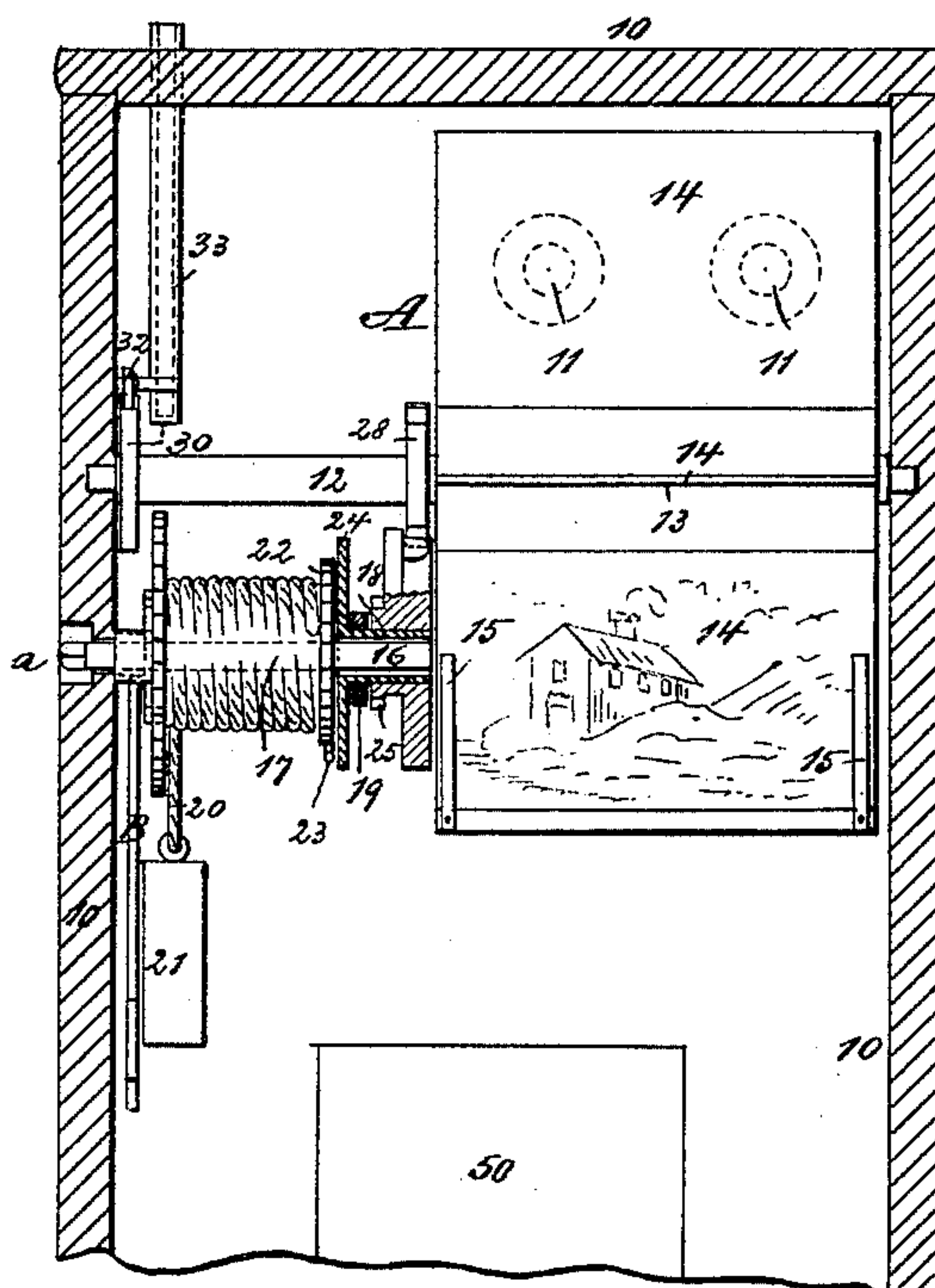
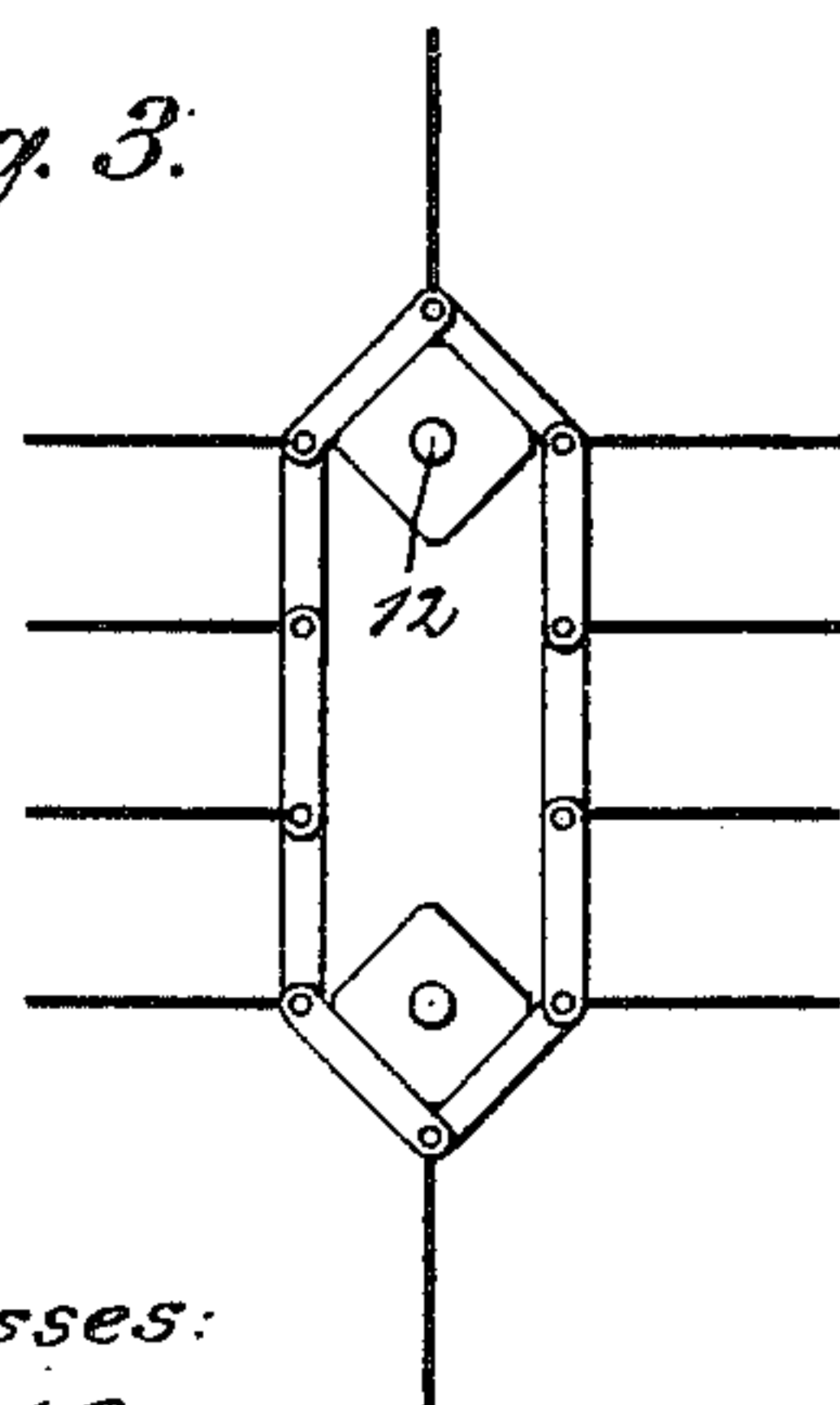
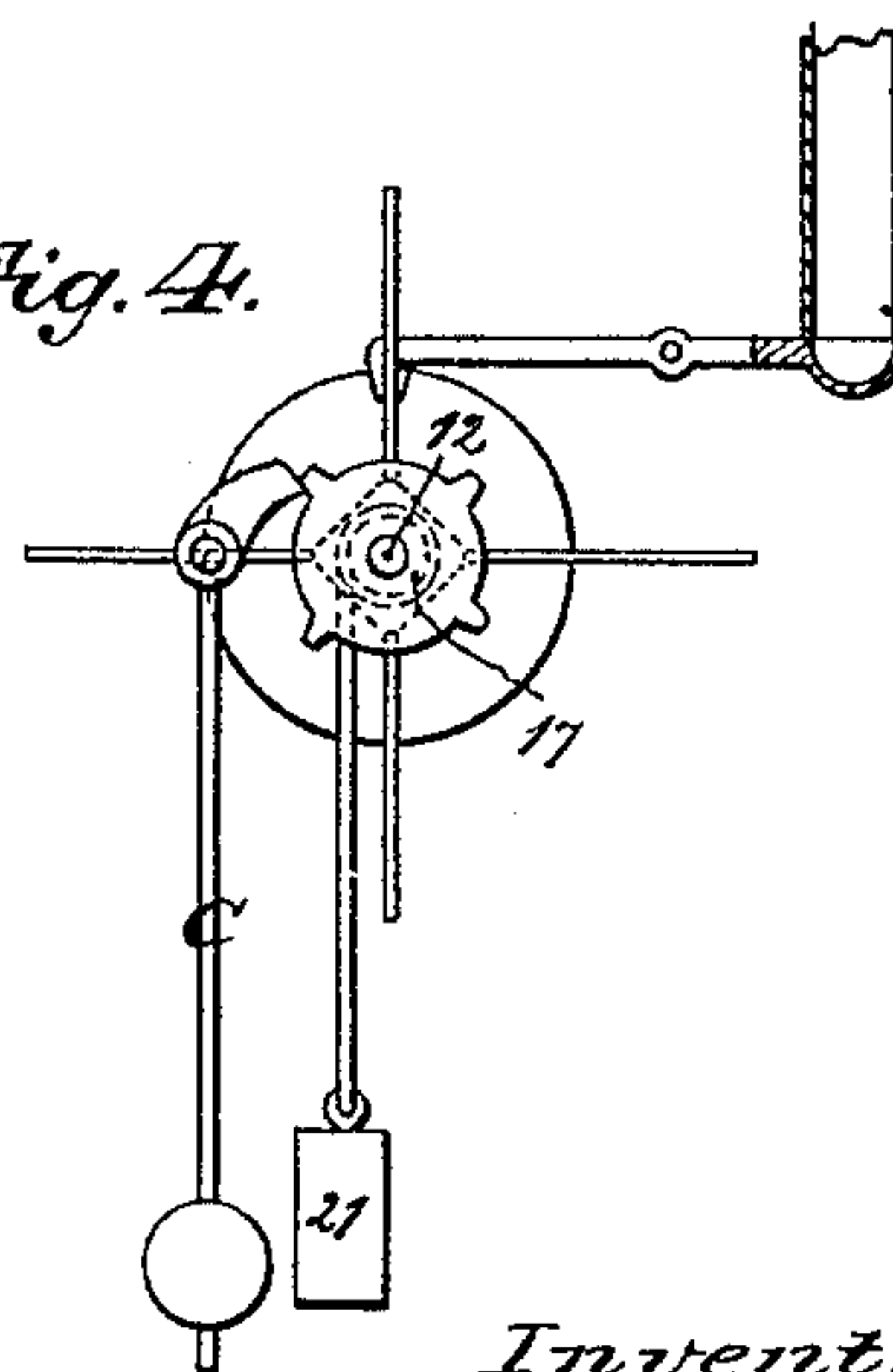


Fig. 3.



Witnesses:
Chas. Beyer
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Fig. 4.



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UNITED STATES PATENT OFFICE.

CLARA EMILY PATTERSON, OF NEW YORK, N. Y.

AUTOMATIC PICTURE-EXHIBITOR.

SPECIFICATION forming part of Letters Patent No. 399,553, dated March 12, 1889.

Application filed May 19, 1888. Serial No. 274,418. (No model.)

To all whom it may concern:

Be it known that I, CLARA EMILY PATTERSON, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Automatic Exhibiting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to coin-operated exhibiting appliances, the object of the invention being to provide an automatic, simple, and durable apparatus adapted to the exhibition of photographic or other views or pictures; and to this end the invention consists of a picture or view holder arranged within a case that is provided with a lens or a pair of lenses, a weight or spring arranged in connection with the view-holder, and a retaining mechanism, which upon the deposit of a coin will be moved to a position such that the weight or spring will be free to act to advance the picture-holder, all as will be hereinafter more fully described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar reference figures and letters indicate corresponding parts in all the views.

Figure 1 is a cross-sectional view of my improved automatic exhibitor, parts being broken away. Fig. 2 is a sectional view taken on line *x x* of Fig. 1. Fig. 3 is a view of a modified form of picture-holder, and Fig. 4 is an end view of a modified form of retarding attachment.

In the drawings, 10 represents a case, in the front wall of which there are fitted lenses 11; or, if desired, a single lens might be substituted for the pair shown. Just below the horizontal focal plane, and preferably in the vertical focal plane of the lenses, there is mounted a shaft, 12, which serves as the support for a picture or view holder, A, said picture or view holder consisting of a hub, 13, provided with radially-extending arms 14, having spring-fingers 15, as shown; or any other proper view-holding appliance might be employed. Below the shaft 12, I mount a short

shaft, 16, which carries a drum, 17, the inner end of the shaft 16 resting in a sleeve, 18, that is supported by a cross-bar, 19, the sleeve being free to revolve in its bearings. To the drum 17 there is connected a cord, 20, which supports a weight, 21, the tendency of said weight being to revolve the shaft 16 in the direction of its arrow, and in order that the sleeve 18 may be moved forward with the shaft I secure a ratchet, 22, at one end of the drum, said ratchet being engaged by a pawl, 23, that is carried by a flange, 24, made integral with or rigidly connected to the sleeve, and in order that the cord may be wound upon the drum without disturbing the position of the sleeve I provide said sleeve with a ratchet, 25, that is engaged by a pawl, 26, said pawl being supported by the cross-bar 19, while the end of the shaft 16, which extends through the case, as shown at *a*, is of proper form to fit the socket of a wrench or key.

In addition to the parts described, the sleeve 18 carries an arm, 26, said arm being provided with a laterally-extending pin or stud, 27, that is adapted to engage one of the slots *b* of a disk, 28, at each revolution of the sleeve. The disk 28 is rigidly connected to the shaft 12, and in the construction shown is provided with four slots, *b*. The number of slots, however, would be varied, so as to correspond with the number of pictures carried by the holder A.

From the construction just described it will be seen that for every revolution of the sleeve 18 the shaft 12 will be advanced one-quarter of a revolution, the slot in the disk 28 being moved from the point marked *c* to the point marked *d* by the action of the pin-carrying arm 26. The mechanism just described is what is commonly known as the "Geneva stop-movement," and the object of introducing the movement in this apparatus is to hold each view to place for an instant after it has been brought into the focal plane of the lenses, whereby a better view is afforded to the user of the exhibitor.

In order that the advancing mechanism may be held against any forward movement except upon the deposit of a coin, I provide the shaft 12 with a disk, 30, that is formed with a stop or projection, 31, that is engaged by one end of a tripping-lever, 32, the other

end of said lever extending to a point beneath a coin-chute, 33, said coin-chute leading upward to a coin-slot, 34, that is formed in the top of the case. That end of the lever 32 which engages the stop or projection 31 is weighted, so as to overbalance the other end of the lever, and consequently the weighted lever end normally rests upon the peripheral face of the disk 30; but if a coin be dropped into the slot 34 it will descend through the chute 33, and, striking the lever 32, will overbalance the weighted lever end and carry such end from engagement with the stop 31, thus permitting the weight to act through the intermediate connections to advance the shaft 12 step by step, so that the pictures carried by the holder A will be successively brought into position in the focal plane of the lenses, the weighted end of the lever dropping back against the peripheral face of the disk 30 immediately upon the discharge of the coin by which the lever was tripped, and consequently after one revolution of the shaft 12 the stop 31 will once more be engaged by the lever and the parts will be held against any continued forward movement until another coin is dropped into the receiving-slot.

If desired, the movement of the weight 21 might be retarded by means of a pendulum-escapement such as that shown at B, or retarding gearing might be interposed between the drum-shaft and the shaft 12.

In Fig. 4 I illustrate a modified construction for bringing the pictures to a momentary stop just as they reach the focal plane. In this case the drum 17 could be carried by the shaft 12, and the stoppage of the parts brought about by a pendulum-escapement, C, the teeth of the star-wheel being so located that just as a view is brought to the required position it will be held to place during a portion of the vibration of the pendulum, as will be readily understood. Access to the coins delivered from the lever 32 is secured by providing the case 10 with a small trap or door, as 50, which trap or door may be placed as desired.

Instead of employing a hub having radial arms which serve as supports for the pictures, I might use such a construction as that shown in Fig. 3, wherein the picture-supporting arms are represented as extending outward from an endless carrier-belt, 41, that is supported on two polygonous drums, one of which drums would in practice be carried by the shaft 12. In this case the space between the picture-supporting arms should be equal to the circumferential width of the polygon faces.

Although I have herein illustrated and de-

scribed specific constructions, I desire it to be distinctly understood that any equivalent constructions could be employed without departing from the spirit of my invention, the essential feature of which is the production of a mechanism, whereby upon the deposit of a coin a series of views will be automatically moved to a position such that they may be seen by the party depositing the coin.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an automatic picture-exhibitor, the combination, with a picture-holder, of an actuating-shaft upon which said holder is mounted, a motor connected to said shaft and tending to revolve the same, and a lever normally blocking said shaft against revolution, said lever being interposed in the path of entrance of a coin, so as to be tripped by said coin, substantially as described.

2. In an automatic picture-exhibitor, the combination, with a picture-holder, of an actuating-shaft upon which said holder is mounted, a motor connected to said shaft and tending to revolve the same, a lever normally blocking said shaft against revolution, and a coin-chute leading to the free end of the lever, substantially as described.

3. In an automatic picture-exhibitor, the combination, with a picture-holder, of an actuating-shaft upon which said holder is mounted, a motor connected to said shaft and tending to revolve the same, a lever normally blocking said shaft against revolution, said lever being interposed in the path of entrance of a coin, whereby it may be tripped by said coin, and a Geneva stop-movement located between the motor and the picture-holder shaft, substantially as described.

4. In an automatic picture-exhibitor, the combination, with a picture-holder, of an actuating-shaft upon which said picture-holder is mounted, a motor connected to said shaft and tending to revolve the same, said motor consisting of a shaft, a drum carried thereby, a cord and a weight attached to said cord, a lever normally blocking said picture-holder shaft against revolution, said lever being interposed in the path of entrance of a coin, whereby it may be tripped by said coin, and a Geneva stop-movement located between the motor and the picture-holder shaft, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CLARA EMILY PATTERSON.

Witnesses:

CHARLES S. PATTERSON,
JAMES WM. PATTERSON.