

L. C. CARY.
Fare-Box.

No. 226,158

Patented April 6, 1880.

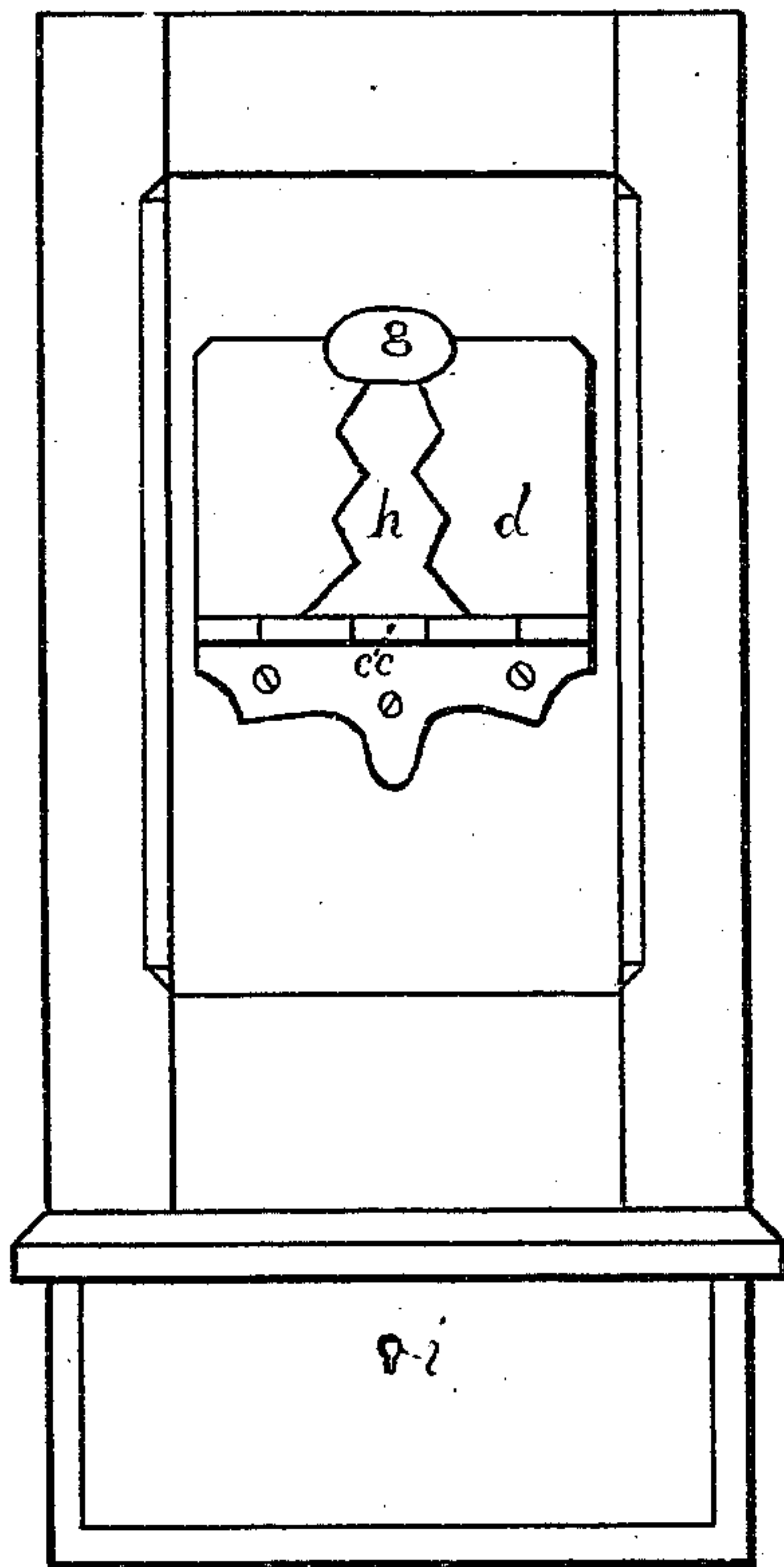


FIG. 1.

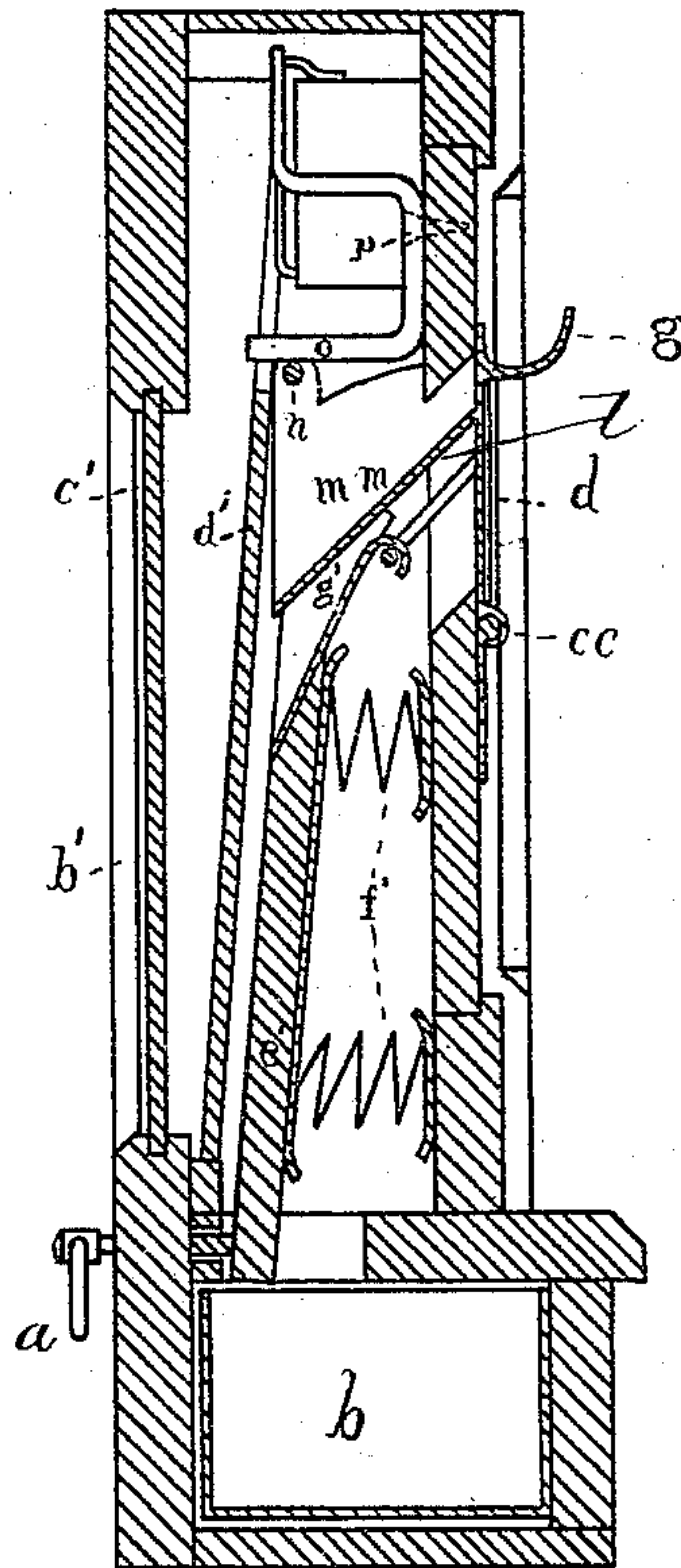


FIG. 2.

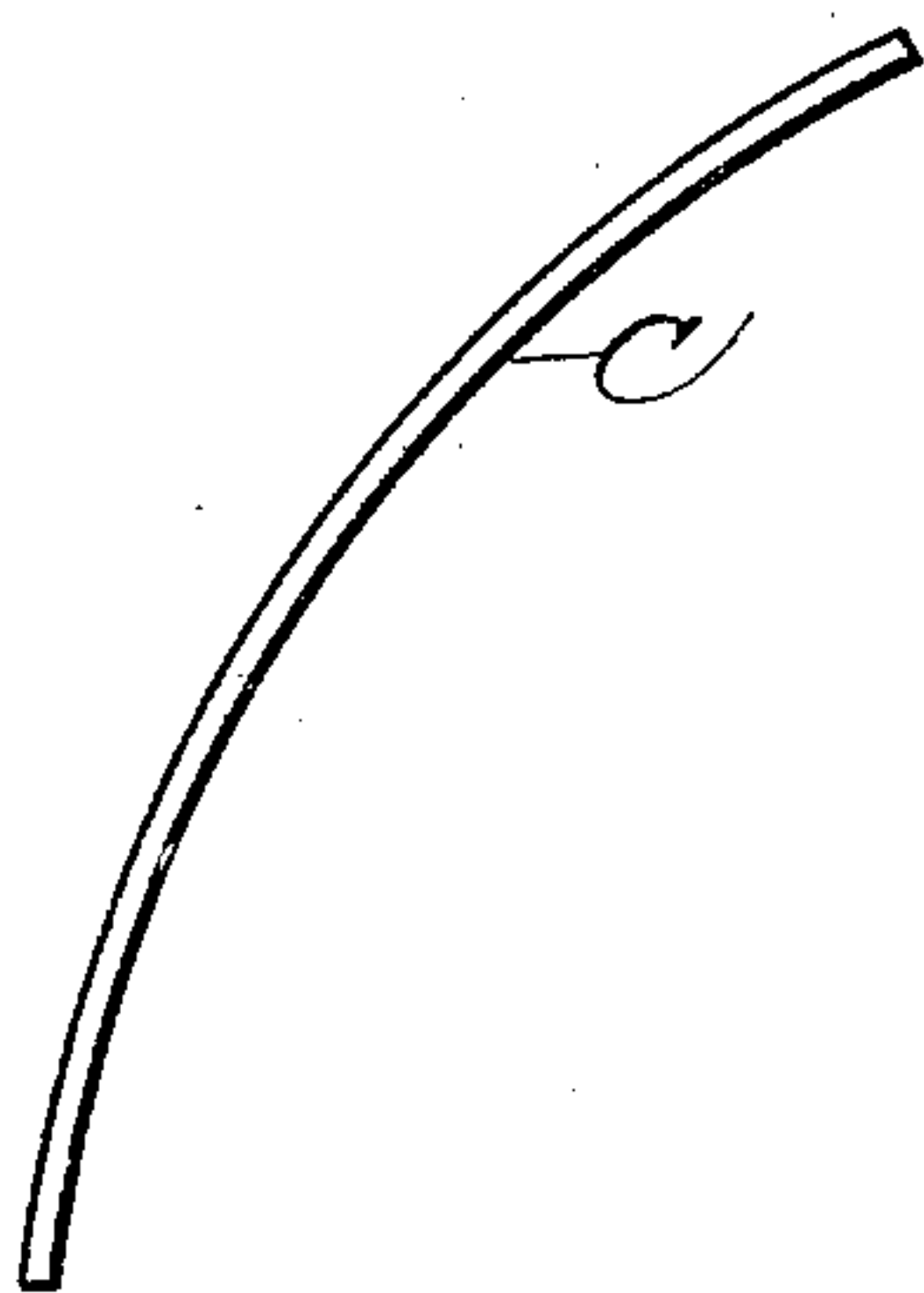


FIG. 3.

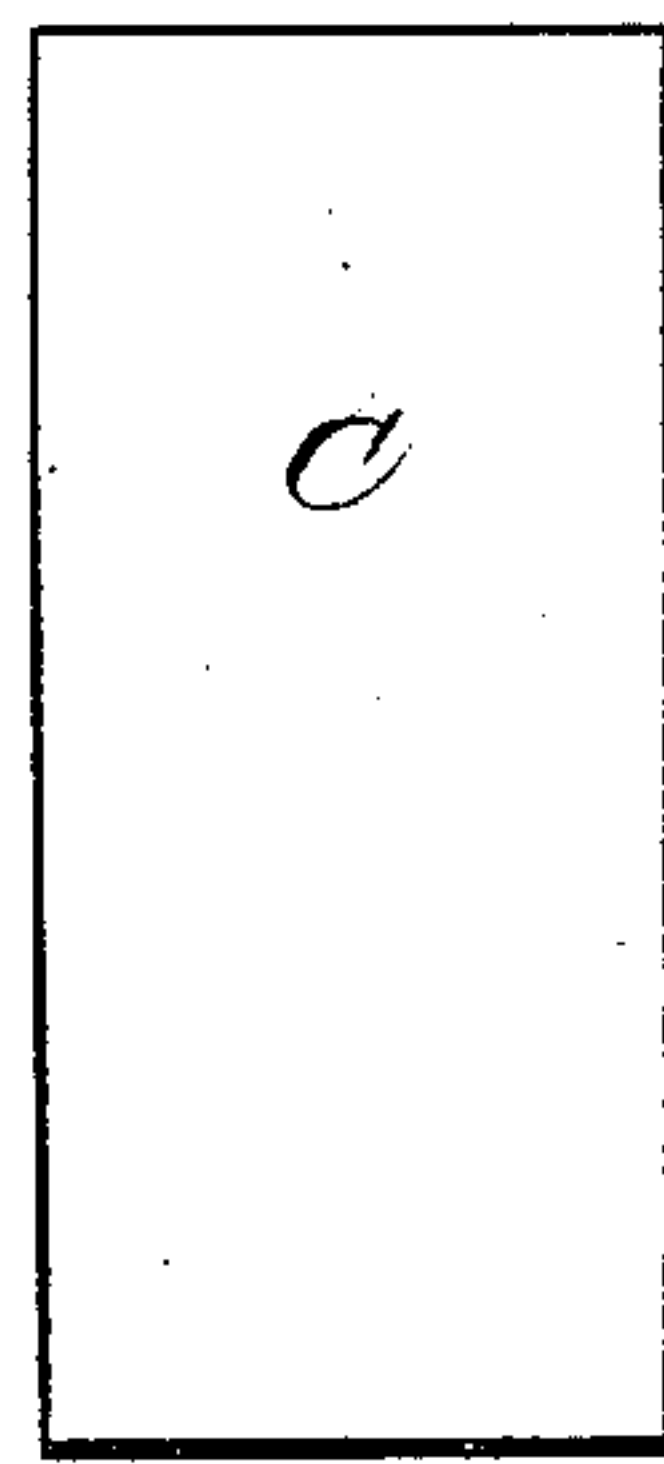


FIG. 4.

WITNESSES:

Chas. H. Kimball,
Frederick A. Thompson,

INVENTOR:

Lewis. C. Cary,
By his atty.
W. W. Scribner.

L. C. CARY.
Fare-Box.

No. 226,158

Patented April 6, 1880.

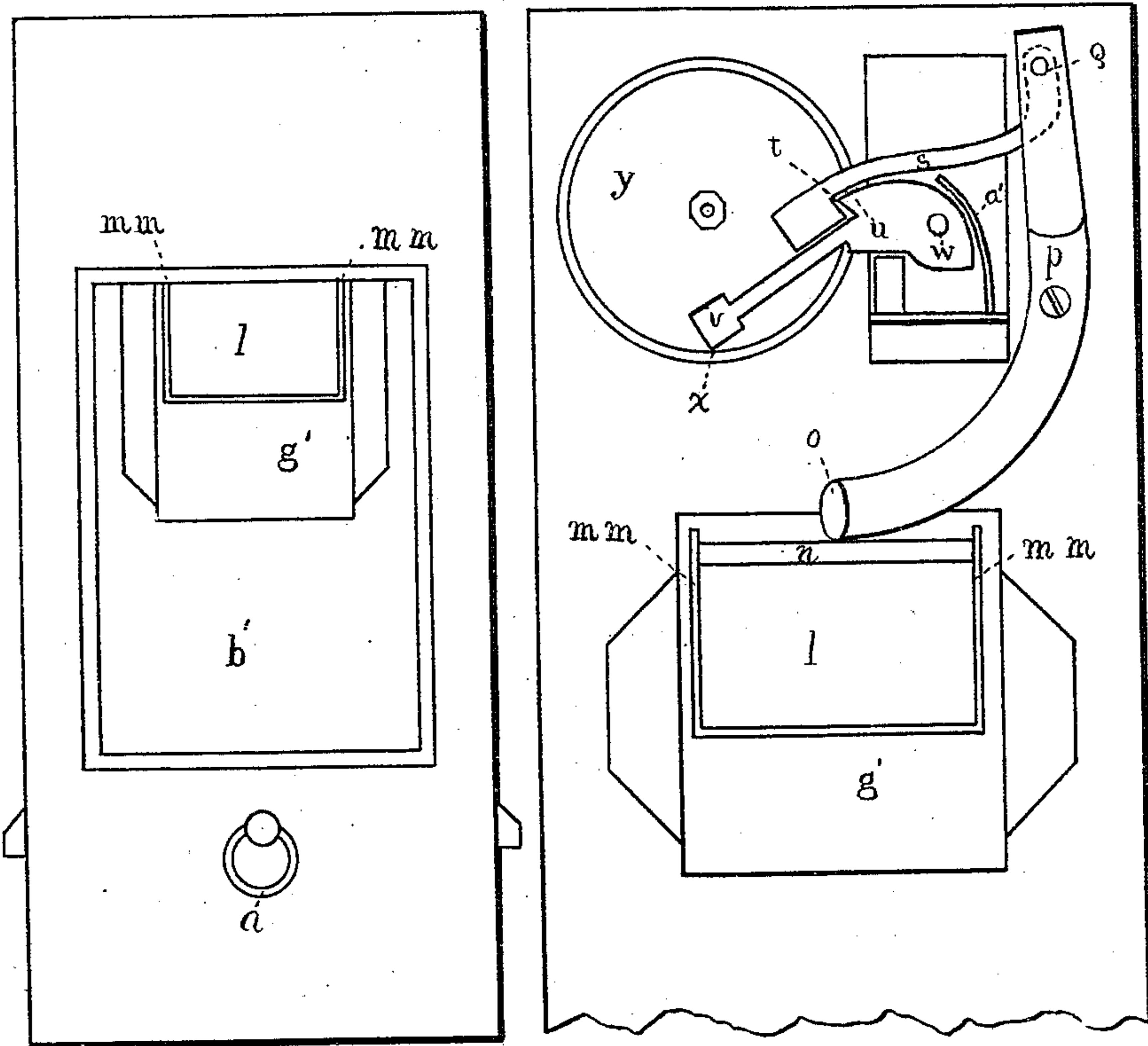


FIG. 5.

FIG. 6.

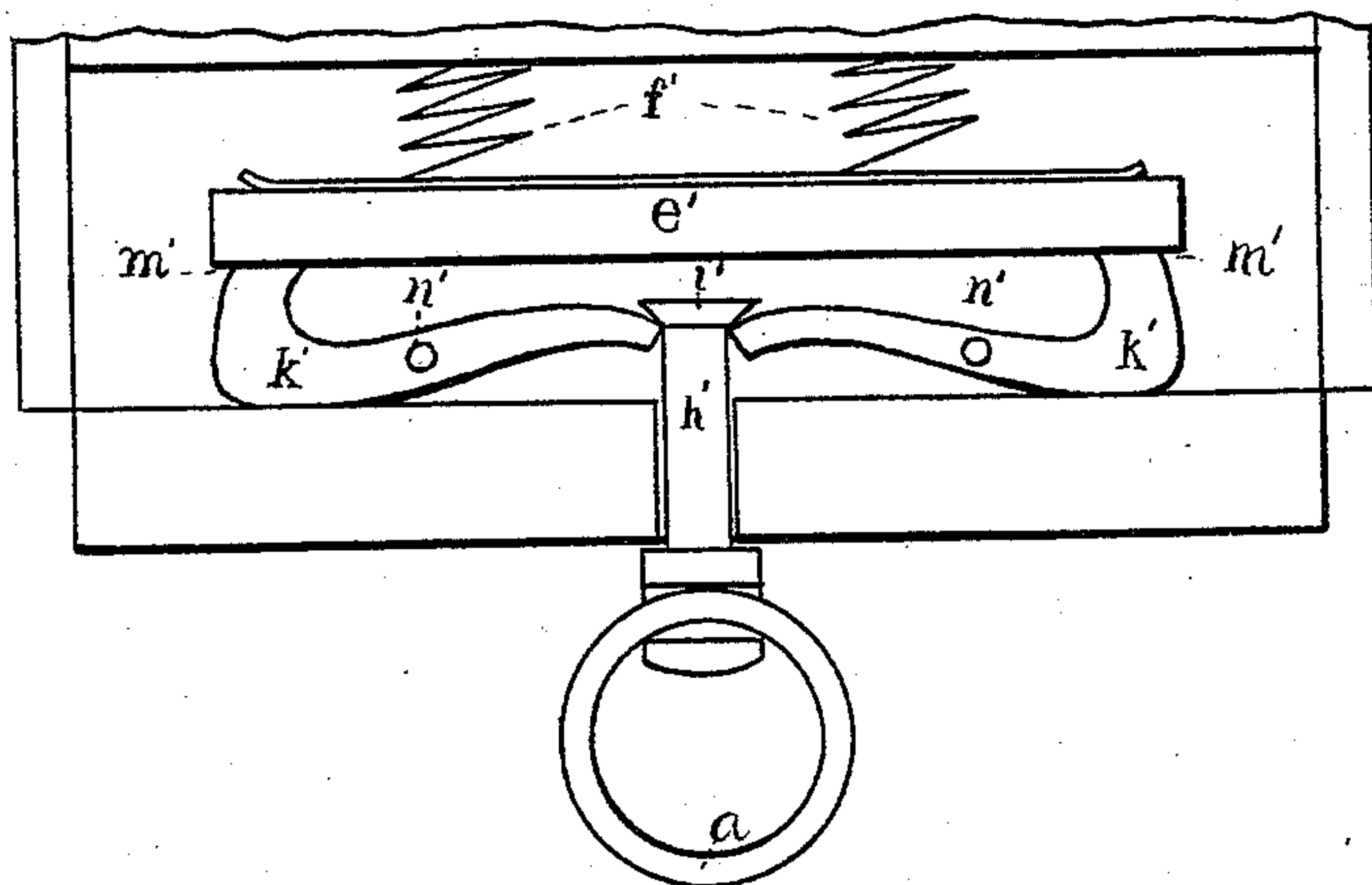


FIG. 7.

WITNESSES:

Chas. H. Kimball.
Frederick H. Thompson.

INVENTOR:

Lewis C. Cary.
By his atty.
W. W. Scribner

UNITED STATES PATENT OFFICE.

LEWIS C. CARY, OF DEERING, MAINE.

FARE-BOX.

SPECIFICATION forming part of Letters Patent No. 226,158, dated April 6, 1880.

Application filed October 16, 1879.

To all whom it may concern:

Be it known that I, LEWIS C. CARY, of Deering, in the county of Cumberland and State of Maine, have invented a certain new and useful Improved Fare-Box; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which are hereby made part of this specification, in which—

Figure 1 is a view of my device as seen from the inside of the car. Fig. 2 is a side view of the same with the inclosing-wall removed to show the interior. Fig. 3 is an edge view of a segmental reflector to be used for throwing light into the box. Fig. 4 is a plan view of the reflector. Fig. 5 is a view of my device as seen from the driver's platform. Fig. 6 are details of the bell and ringing mechanism on an enlarged scale. Fig. 7 is a view of the pull and bell-crank levers which operate to drop tickets or cash into the cash-box at the bottom.

Same letters show like parts.

The object of my invention is to provide a fare-box for horse-cars and other public conveyances in which the fare is put beyond the control of operatives.

My device is intended not only to receive the fare and hold it safely, but also provides means by which the fares, whether in cash or tickets, are held in a position to be conveniently inspected by the driver or other employé, as long as may be necessary to determine its correctness, and then, without at any time being under the control of such employé for any other purpose, dropped into a proper receptacle.

This device is to be placed in the vehicle so as to be accessible as to its inner face, (shown in Fig. 1,) and in an opening cut in the wall of the vehicle, so that its outer face, as shown in Fig. 5, is convenient for the inspection of the driver and easily accessible to him for the purpose of pulling the ring *a* to drop the collected fares into the locked box or receiver *b*.

For use in the night-time, the reflector *C*, Fig. 3, is placed at such a point that light coming from the lamp which lights the vehicle will be thrown strongly upon the elastic

cushion *e'*, to enable the person whose duty it is to see what fares have been paid, and whether they are correct in amount.

My invention consists of the box one of whose sides is shown in Fig. 1, made of wood or other suitable material, with a glass front on the side shown in Fig. 5. This box, when used in a horse or tramway car, should be placed in a suitable orifice in the end wall of the car, the length of the whole device, when so used, being preferably the same as that of the window beside which it is placed, in order to conveniently adapt it to that position.

At *d*, Fig. 1, is shown a lid or door, hinged at *c c*, made to open inward by pulling the knob *g*, *h* being a strap across the lid, terminating, as shown, in the knob or pull *g*. The orifice covered by the lid *d* is the point where the fares are inserted.

At *i*, Fig. 1, is shown the key-hole, locking the drawer or receiver *b* at the bottom of the device, where the fares finally rest until taken out by the person provided with a key for that purpose. This drawer should be provided with a good lock and be substantially made, in order to securely keep the funds deposited therein.

At *l*, Fig. 6, is shown a short conductor, intended to guide the fares as they fall from the hand of the person inserting them. This conductor is attached to the inside of the lid *d*, and of course follows it as it draws out or springs back into place. This hopper-shaped conductor *l* has across its elevated sides the transverse bar *n*, and upon this bar *n* rests the short arm *o* of the segmental armature *p*. This segmental armature *p* is pivoted at *q*, and has that pivot *q* in common with the latch-toggle *s*. The latch-hook of the toggle *s* meshes at *t* with the hook *u* of the bell-hammer *v*, this bell-hammer being pivoted at *w*, and having at *x* its point of contact upon the bell *y*, the bell-hammer *v* having force given to its blow by the spring *a'*.

At *b'*, Fig. 5, is shown a rectangular opening into the body of the device, covered by a plate of glass, *c'*, through which is seen the hopper-shaped conductor *l*, with its attached bar *n* at the top. This outer pane of glass, *c'*, is merely for protection from the weather, &c., and discloses to view the hopper *l*, an inner

pane of glass, d' , Fig. 2, and an elastic cushion, e' , which cushion e' is, when at rest, pressed against the inner glass, d' , by the springs $f' f'$, Fig. 2. These springs $f' f'$ are shown in the drawings to be spiral; but any mechanical equivalent of spiral springs may be used, if desired.

At the upper end of the cushion e' a slot is cut corresponding in size to the hopper l , and in this slot a hopper, g' , is placed, so as to form a continuation of the hopper l when the latter is drawn out; and by a hinge under these hoppers the hopper l is connected with the cushion e' , and partakes with it of the power of the springs $f' f'$. This cushion e' is covered with leather and stuffed, or in any of the well-known methods given a cushion elasticity, so that, having a general elasticity through its whole plane by means of the springs $f' f'$ and a special elasticity as to each point in its surface by reason of its cushion-like character, it presses upon the inner glass, d' , with a double elasticity suited to its functions, which I shall hereinafter describe.

The ring-pull a is shown in Fig. 7 upon an enlarged scale, and also its shank h' , passing through the wall of the device below the glass, the shank having upon its inner end an enlargement, i' , so that it would have a T-shaped section engaging the arms of the bell-crank levers $k' k'$. These levers are pivoted at $n' n'$, and at $m' m'$ come in contact with the cushion e' near its lower end.

The operation of my invention is as follows, viz: A passenger, having either ticket or cash, desiring to pay his fare, draws the knob g toward him and drops his fare in the hopper-shaped conductor l . As he draws the knob toward him this motion is resisted by the engagement of hopper and cushion e' , as described. At the same time the bar n , rising upon the arc described by the movement of the hopper upon its pivots, presses against the arm o of the armature p , moves the hook s in the hook u of the bell-hammer, and thus rings the bell y to attract the attention of the person in charge to the fact that a fare has been paid. The passenger releasing his hold upon the knob g , the lid springs back into its place by the operation, as described, of the springs $f' f'$. This lid being closed by the springs $f' f'$ being relieved from pressure, the cushion e' springs up and catches the fare between it and the inner glass, d' , the cushion being able, from its peculiar double-elastic character, to hold a coin and a ticket consisting of a small slip of paper, even in close juxtaposition, as long as may be desired, in full

view of the driver as he stands upon the platform outside. The driver is enabled to see the fare in the night by means of the light from the car-lamp thrown down through the glass top of the device being properly directed and focalized by the reflector C, Figs. 3 and 4.

When desired, all the fares may be deposited by the driver in the fare-receiver b by pulling the ring-pull a outward, and then allowing it to fly back to place. The T-shaped section i' of the end of the pull a pulling the arms of the bell-crank levers $k' k'$ downward, their opposite arms press back the cushion e' , enlarge the distance between the cushion e' and the glass d' , so that the fares may fall into their box, as described.

I am aware of Letters Patent No. 164,685 to A. E. Hovey, dated June 22, A. D. 1875, and I claim nothing described by him, as my device is not intended to require the simultaneous co-operation of the passenger and the driver for the payment of the fare, as is the case in Hovey's device.

I am also aware of Letters Patent, dated December 30, A. D. 1873, to G. C. Thomas, and I claim none of the devices described by him, as Thomas's patent is for series of locked boxes in a railway-car, with devices for unlocking them all at the same time by means of a notched bar, described therein.

I am also aware of Letters Patent to J. F. Winchell, dated February, A. D. 1873, and I do not claim an apron, broadly, but only when it has a doubly-elastic function, as I have described, for holding coin and tickets at the same time.

I do not claim any combination of a lock with the lock-box described by me, as that box may be secured by any of the well-known methods of effecting that purpose.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The doubly-elastic cushion e' , in combination with the hoppers l and g' , springs $f' f'$, and lock-box or fare-receiver b , and glass d' , in the manner and for the purposes set forth.

2. In an automatic fare-box, the combination of the hoppers l and g' , springs $f' f'$, cushion e' , and glass d' , in the manner as set forth.

3. The ring-pull a , bell-crank levers $k' k'$, in combination with the cushion e' , springs $f' f'$, rod h' , and the box b , all in the manner and for the purposes set forth.

LEWIS C. CARY.

Witnesses:

D. W. SCRIBNER,
WM. H. WYMAN.