

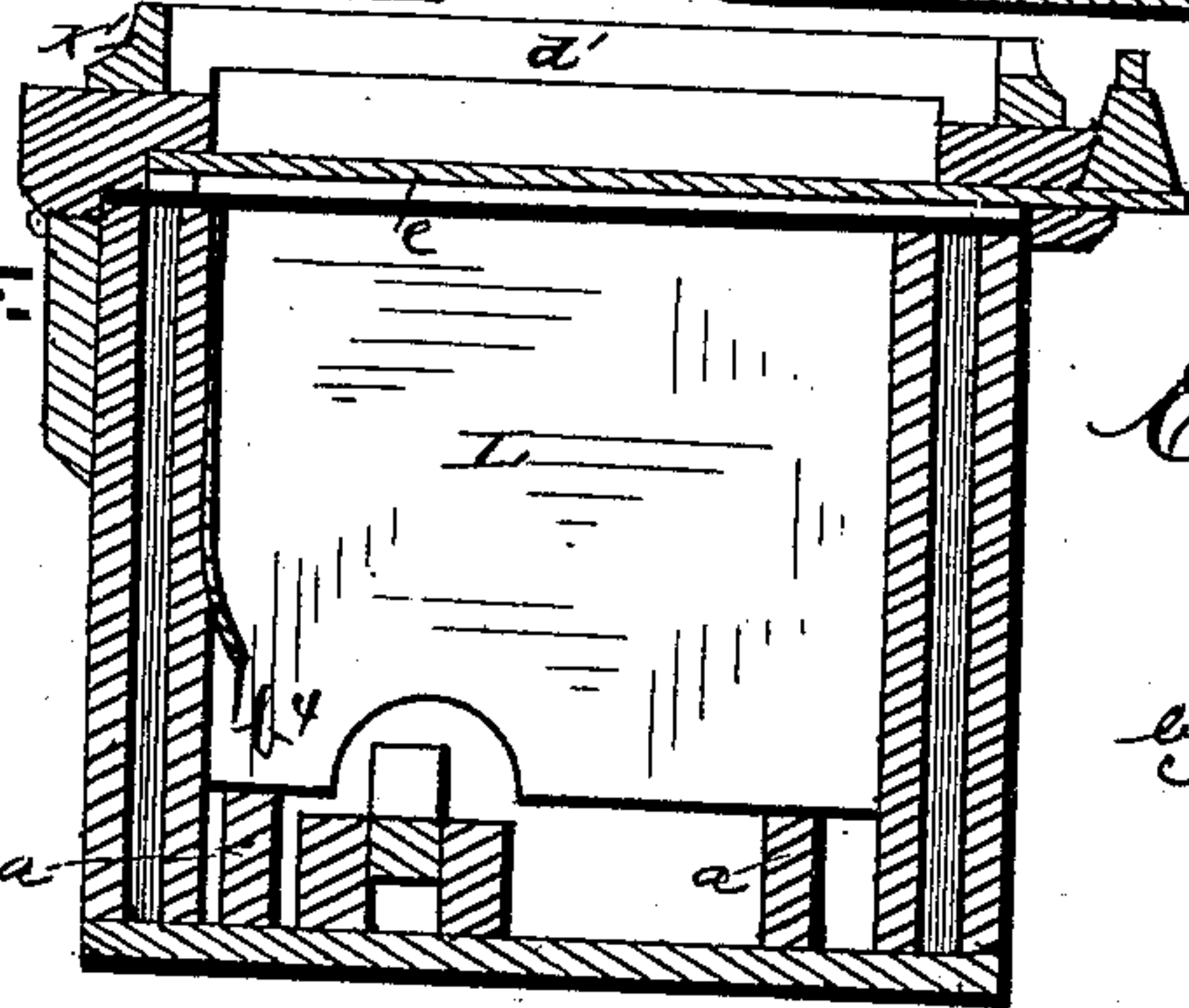
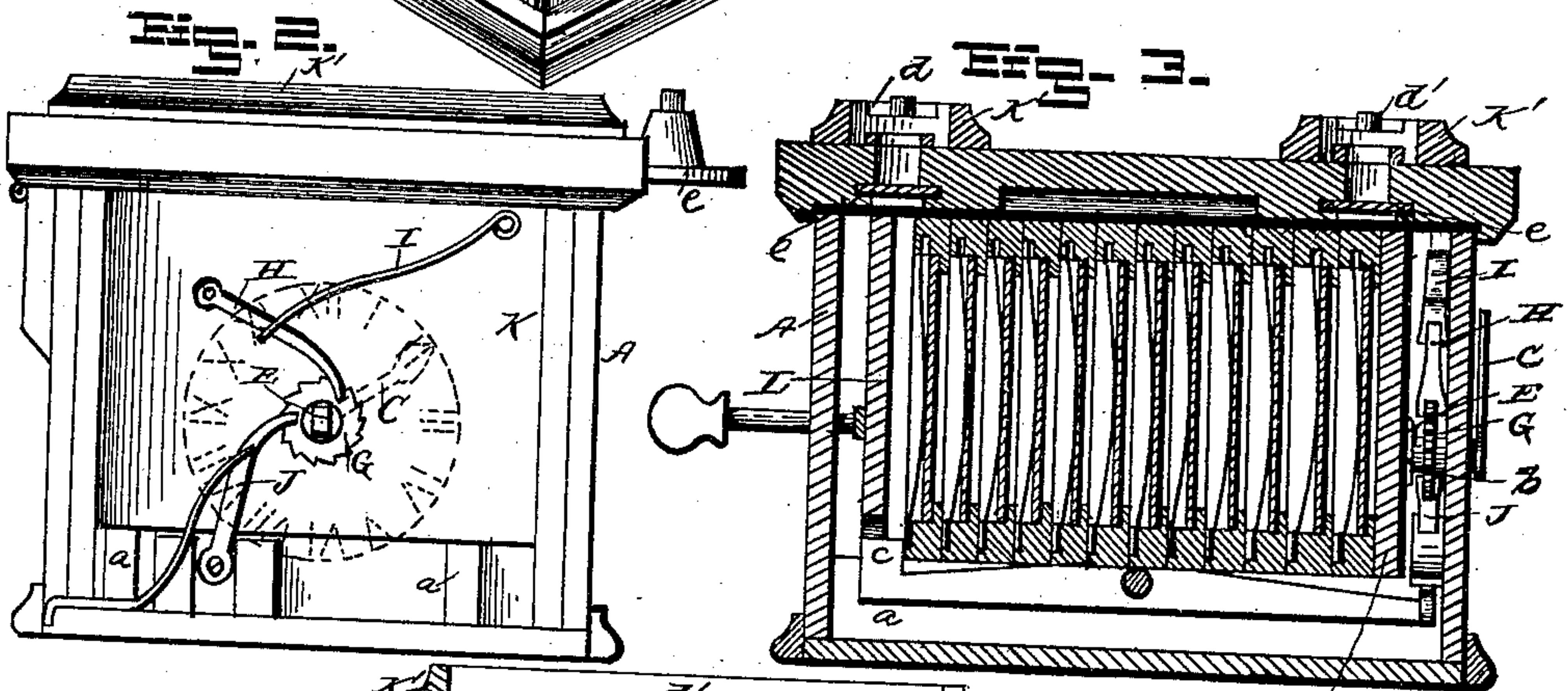
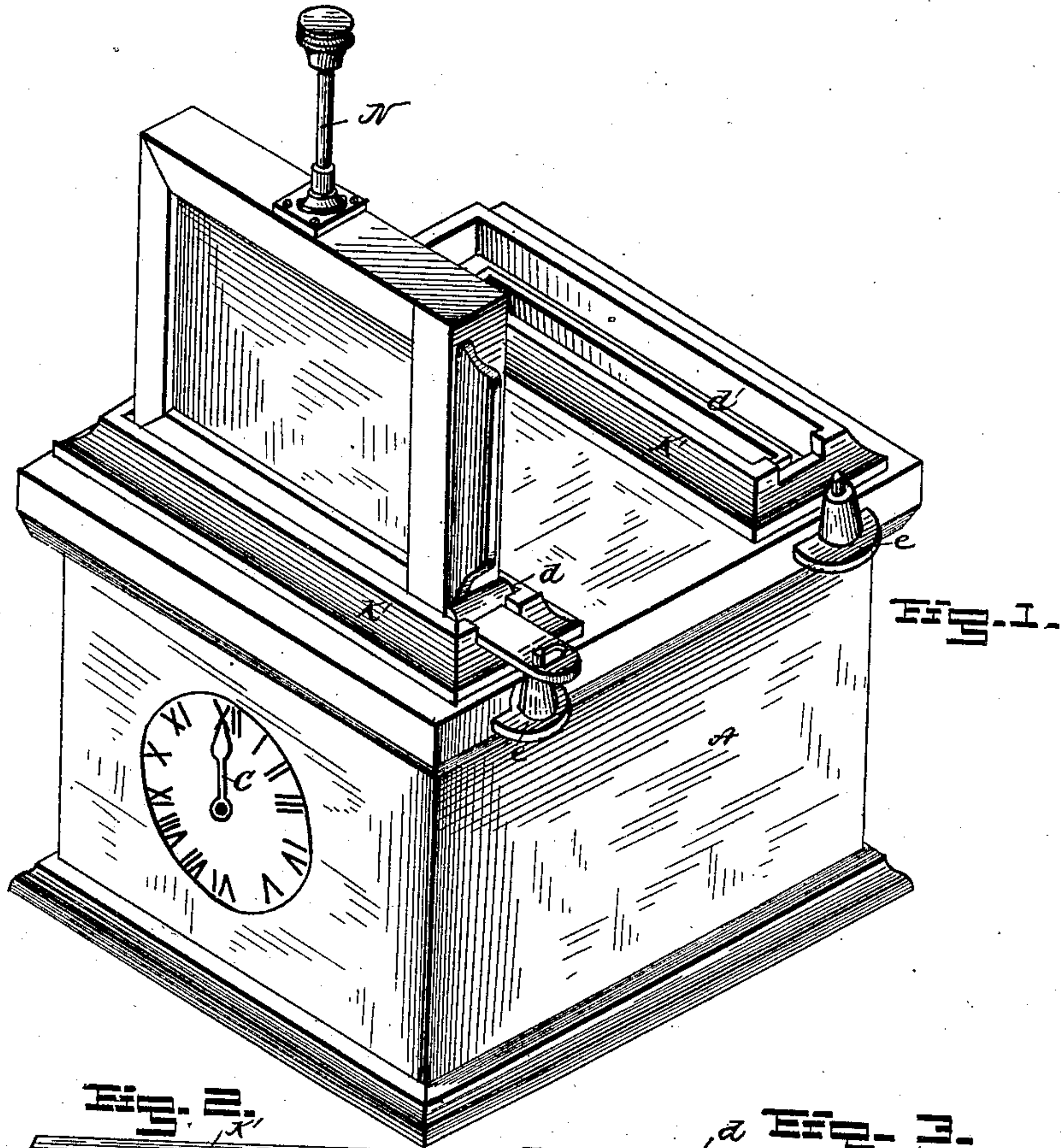
(No Model.)

E. L. BERGSTRESSER.

DRY PLATE HOLDER.

No. 300,438.

Patented June 17, 1884.



WITNESSES
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UNITED STATES PATENT OFFICE.

EDWIN L. BERGSTRESSER, OF HUBLERSBURG, PENNSYLVANIA.

DRY-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 300,438, dated June 17, 1884.

Application filed March 23, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWIN L. BERGSTRESSER, a citizen of the United States, residing at Hublersburg, in the county of Centre and State of Pennsylvania, have invented a new and useful Dry-Plate Holder, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to a dry-plate holder or cabinet, and it has for its object to provide a device of this character for retaining plates which shall thoroughly prevent any access of light to the same while they are being removed from said cabinet for exposure in the camera, and, further, to provide improved means whereby it may be plainly visible the number of unexposed plates that are in the holder.

With these ends in view the invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my improved cabinet or plate-holder, showing the devices for withdrawing a plate from the cabinet for exposure. Fig. 2 is a rear elevation, the casing being broken away. Fig. 3 is a longitudinal section, and Fig. 4 is a transverse section.

In the accompanying drawings, in which like letters refer to corresponding parts in the several figures, A is an outer box or casing, which is preferably of the form shown. Upon the bottom or floor of this casing are secured strips *a* for the plate-holders to slide upon. Upon the outer side of the rear end of the box or casing A is provided a disk having numbers marked corresponding to the number of plates the casing A is adapted to contain, or, if preferable, these numbers may be marked directly on the casing itself.

C represents a hand or indicator adapted to travel around said disk or figures, making one movement as each plate is inserted in the casing A, as will be more fully described. This hand or indicator C is rigidly mounted on a shaft, E, having bearing in the rear end of the casing, and provided on its inner side with a ratchet-wheel, G. Upon the inner side of the end of the casing A, adjacent to the ratchet-wheel, is provided a pivoted pawl, H, adapted to bear against the upper side of said ratchet-wheel, said pawl being held in position thereon

by means of a spring, I, secured upon the inner side of the said end.

J represents a lever, which is pivoted between two of the strips *a*, and is provided at its forward end with an upwardly-projecting arm adapted to bear against and operate the ratchet-wheel from the under side thereof, and held in position by means of a spring, which is recessed or cut away at its end to form arms, which inclose the end of said arm and prevent any lateral movement of the same.

K represents a partition-strip, which incloses said mechanism, and which is provided with a bracket, *b*, for the reception of the end of the ratchet-shaft. The forward end of the actuating-lever is provided with an upwardly-projecting extension, *c*. The lever is also provided at its forward end and upon the under side thereof with a coil-spring, which bears against the floor of the casing at its other end, and serves to return the lever to its proper position after it has been depressed by the insertion of a plate. Upon the cover of the casing are provided slots *d d'*, having grooves in their sides for the passage of slides *e*, having on their under side depending lugs to limit the forward movement further than to open the said slot.

K' represents strips inclosing said slots, the same being recessed or cut away at their ends, as will be described.

L represents a pusher, which is provided on its lower end with a slot to fit over the upwardly-projecting extension of the lever, and provided with a rod detachably secured to its rear side, the other end of said rod projecting through the casing, and provided with a handle or knob for operating the same. Upon one of the inner sides, adjacent to the pusher, is provided a flat spring, *b'*, which, when a plate is inserted in the cabinet, holds the same in an upright position until it can be moved forward by the pusher, thus preventing all liability of the plate dropping, which would otherwise be the case, and to place the plate in an upright position, as would be necessary before it could be pushed forward, would necessitate the removal or lifting of the cover, and consequently the damaging exposure of the plates.

In using the above-described cabinet I employ a casing, as shown, the same being pro-

vided with a slide or shutter upon its side and with a slide upon its lower edge. In the upper edge of this shutter is provided a screw-threaded bracket, having communication with
5 the inner side of the said shutter.

N represents a rod, provided at its upper end with a knob or handle and at its lower end with a screw-thread. This shutter is adapted to be placed directly over the rear
10 slot, *d*, of the cover, fitting between the strips inclosing the same, its lower slide fitting in the recessed portion in the end of the same. The holders containing the dry plates are provided with screw-threaded brackets upon their
15 upper sides, and are situated one, or the rear one, directly under said screw-threaded rod. To withdraw a plate the slides are withdrawn and the rod screwed into the bracket of the plate-holder, and the same then raised into
20 the shutter. The slide of the shutter is then closed and the shutter removed. After the plate has been exposed and it is desired to return the same to the cabinet or casing, the shutter containing the plate is placed over the
25 slot *d'*, the slides withdrawn, and the plate inserted in the casing by means of the rod, the plate-holder depressing the end of the lever and registering "1" on the dial, thus showing that one exposed plate is in the box. The plate-
30 holders are then moved forward by means of the pusher.

It will be seen from the above description that by the use of my improvement a plate may be readily withdrawn from the casing for
35 exposure, and placed therein for developing at some future time, without any possibility of exposure to the light.

It will also be seen that by the use of the devices described it is readily apparent at all
40 times the number of plates that have been exposed, and deducting the number of plates that have been exposed from the number the box contains or is adapted to contain (as the box is usually filled) shows exactly how many
45 plates there are yet left for exposure, thus preventing any confusion or exposure of plates that had already been operated upon.

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

1. A cabinet for containing plates, provided

with mechanism which automatically registers each plate upon a dial as it is placed therein after exposure, substantially as set forth.

2. In a cabinet for holding plates, the combination, with mechanism for automatically
55 registering each plate as it is inserted, of a pusher for moving the plates forward, substantially as set forth.

3. In a cabinet for holding plates, the combination, with a suitable dial having figures
60 marked thereon, of a shaft carrying a ratchet-wheel, and an indicator, and a lever provided with means for operating said ratchet-wheel, as set forth.

4. In a cabinet for holding plates, the combination, with a suitable dial having figures
65 marked thereon, of a shaft carrying an indicator, and ratchet-wheel, a spring-pressed pawl engaging said ratchet-wheel, and a lever
70 provided at its forward end with an arm to engage said ratchet-wheel, substantially as set forth.

5. In a cabinet for holding plates, the combination, with a dial having figures marked
75 thereon, of a shaft carrying a ratchet-wheel and indicator, and having bearing at its rear end in a bracket secured to a strip inclosing said ratchet-wheel, a spring-pressed pawl
80 adapted to engage said ratchet-wheel, and a lever provided with an arm for actuating the same, substantially as set forth.

6. In a cabinet for holding plates, the combination, with a dial having figures marked
85 thereon, of a shaft carrying a ratchet-wheel and indicator, a spring-pressed pawl adapted to engage said ratchet-wheel, a lever provided with an arm at its forward end for actuating
90 said ratchet-wheel, a spring for retaining the same in position, said lever being provided at its forward end with an upwardly-projecting extension, and a coil-spring, located between the end of said lever and the floor, substantially as set forth.

In testimony that I claim the foregoing as
95 my own I have hereto affixed my signature in presence of two witnesses.

E. L. BERGSTRESSER.

Witnesses:

J. E. HARPER,
D. S. KELLER.