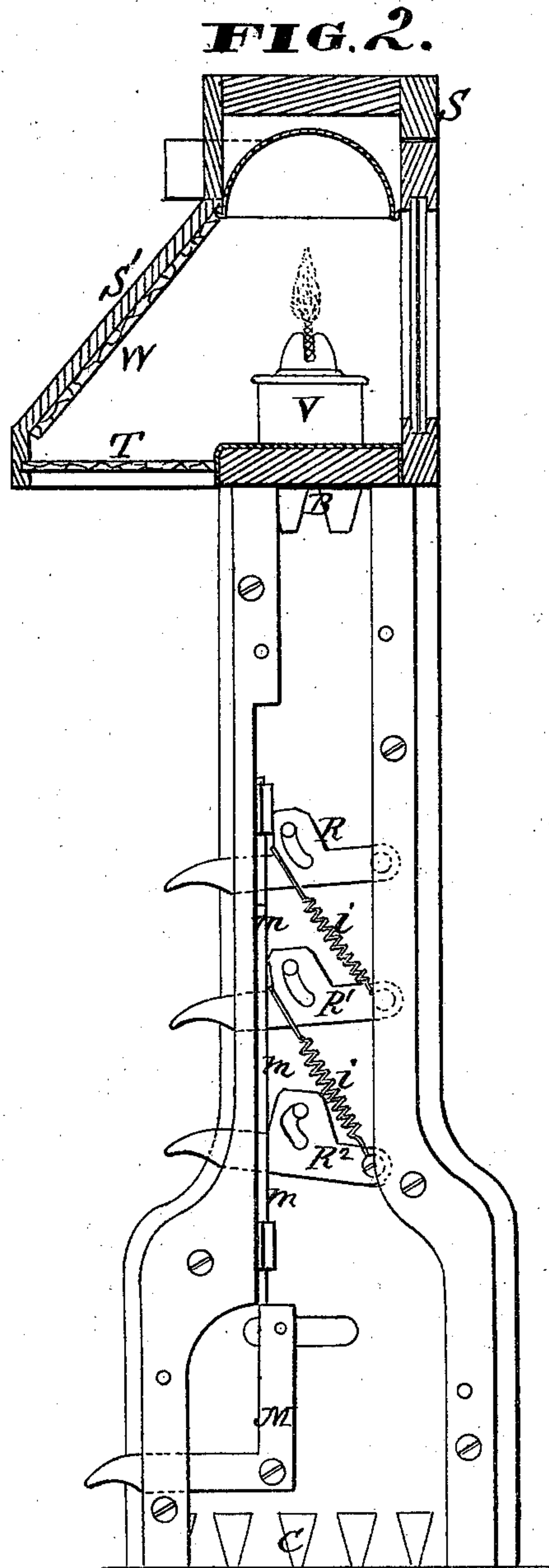
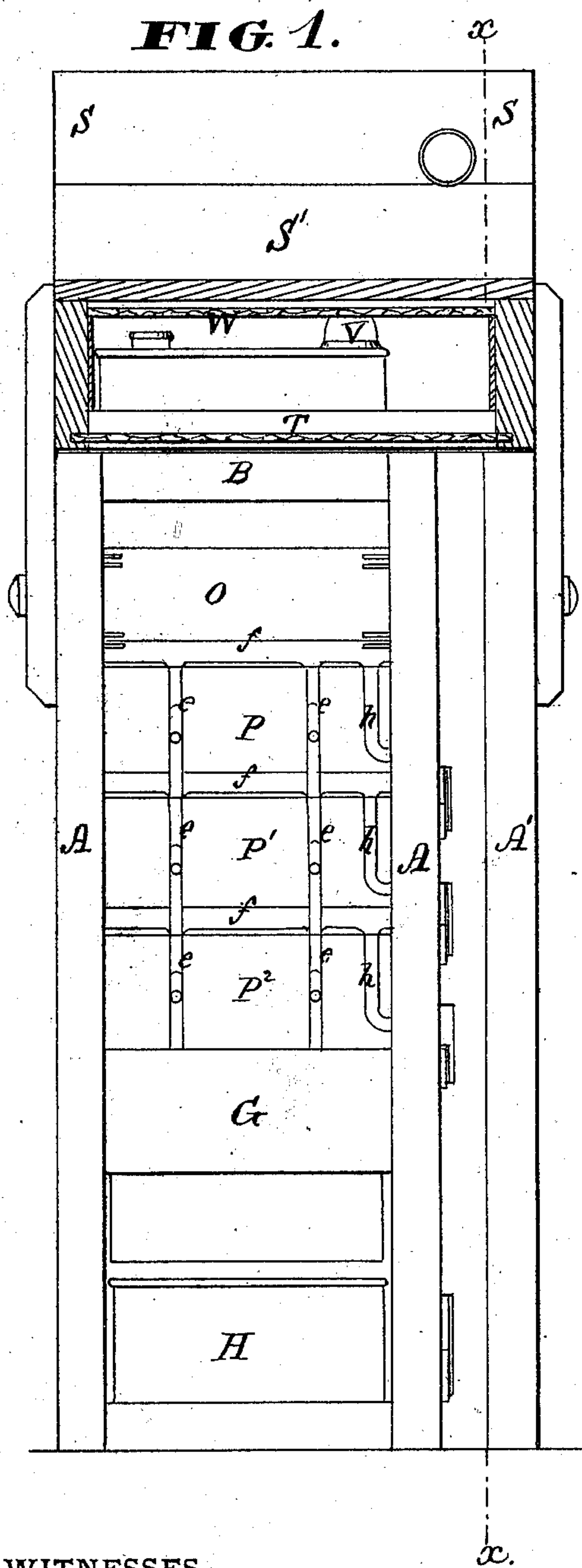


**T. L. JOHNSON.**  
**Fare-Boxes.**

No. 143,698.

Patented Oct. 14, 1873.



WITNESSES.

*Chas. C. Upperman*  
*D. Smith*

INVENTOR.

*Tom L. Johnson.*  
By *T. Upperman* Attorney.

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FIG. 3

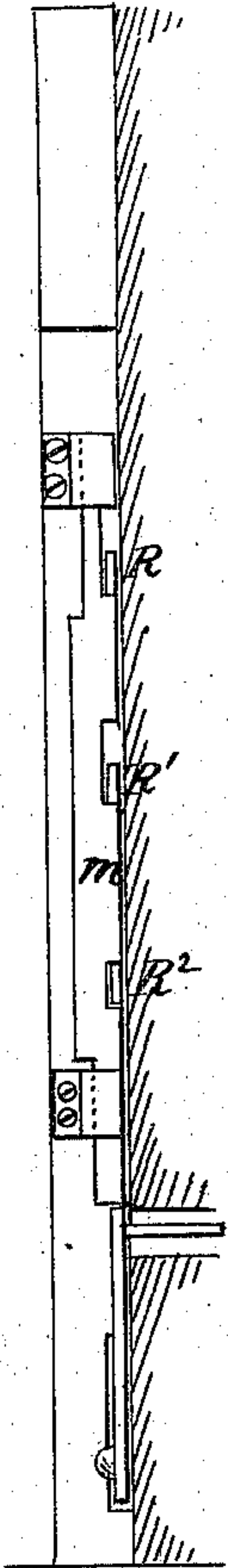


FIG. 4

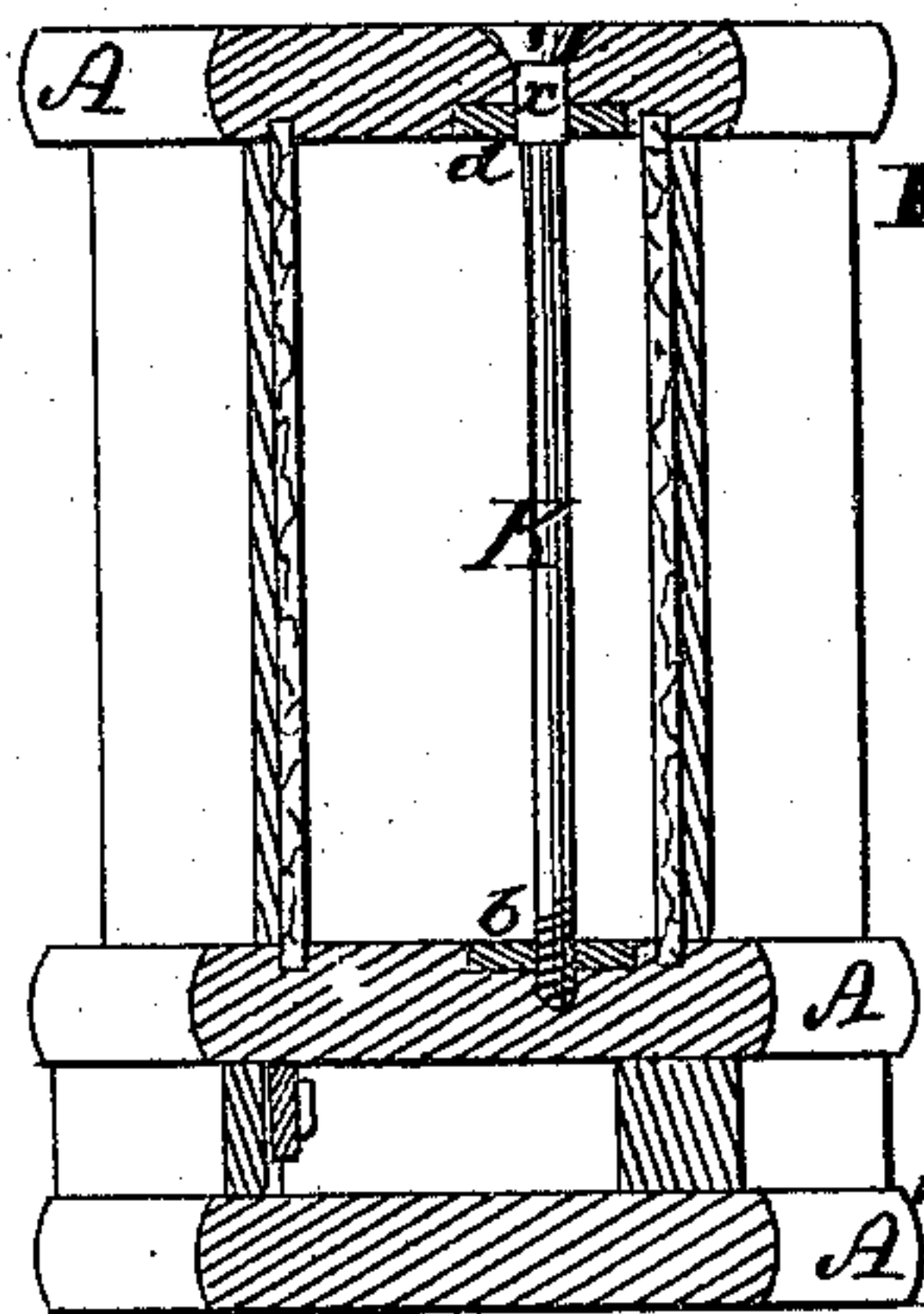
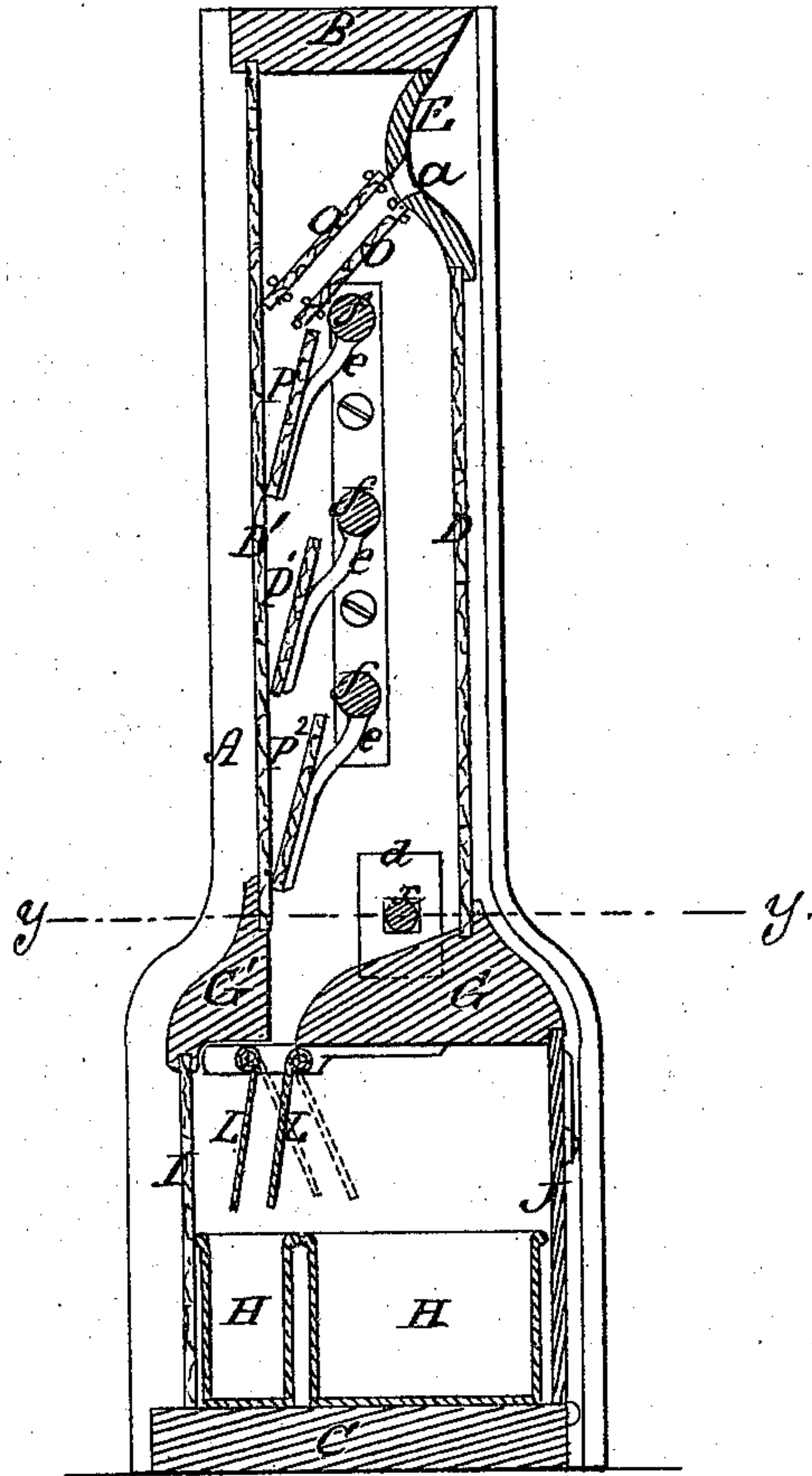


FIG. 5.

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# UNITED STATES PATENT OFFICE.

TOM L. JOHNSON, OF LOUISVILLE, KENTUCKY.

## IMPROVEMENT IN FARE-BOXES.

Specification forming part of Letters Patent No. 143,698, dated October 14, 1873; application filed October 4, 1873.

*To all whom it may concern:*

Be it known that I, TOM L. JOHNSON, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Fare-Boxes for Railroad-Cars; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings which make part of this specification, and in which similar letters refer to like parts.

The nature of my invention consists in the construction and arrangement of a fare-box for street-railroad cars, intended more especially for such railroads as use metallic tickets or nickels of a uniform size and weight.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a view from the rear of a fare-box for railroad-cars embracing my improvements. Fig. 2 is a vertical section thereof through line *xx* of Fig. 1. Fig. 3 is a detached view of the slotted sliding bar which operates the several money-drops. Fig. 4 is a transverse vertical section, and Fig. 5 is a horizontal section through line *yy* of Fig. 4.

The frame or box proper of my fare-box is constructed in the following manner: A A represent the two side pieces; B, the top, and C the bottom. The top and bottom are dovetailed into the side pieces, so that the top cannot be pulled out upward, nor can the bottom be pulled out downward. The side pieces A A are grooved on their inner sides for the reception of two glass plates, D and D', forming, respectively, the front and back sides of the main part of the box. Above the front plate D is inserted a block, E, with apertures *a a*, through which the nickels are to be passed. The lower edges of the glass plates D D' are supported, respectively, upon blocks G and G', and below said blocks is a chamber for the reception of two boxes, H H. The rear side of this chamber is closed by a glass plate, I, while the front side is closed by a door, J, having a suitable lock. All the glass plates and blocks have suitable grooves and shoulders or offsets in the sides A A. After the block E, plates D, D', and I, and block G' have been inserted

in their places, a single long screw, K, is passed through one side piece and screwed into a plate, *b*, attached to the other. This screw is on or about on a line with the lower edges of the plates D D', and serves to firmly fasten the parts of the box together. Near the head of this screw is a square portion, *x*, made, and the screw is passed through a loose plate, *d*, within the box, before entering the stationary plate *b*. When the screw K has been tightened the plate *d* is moved onto said square part *x*, and fits in a recess made for its reception in the side piece A. When, now, the block G is slipped into its place, it confines the plate *d* in this recess, and thus locks the screw, so that it cannot be turned from the outside of the box. The block G is held by the locking of the door J, and hence it is only by unlocking this door, removing the block G, and moving the plate *d* out of its recess from the square portion *x* that the screw can be turned to release the other parts of the box. To the under side of the block G are hinged two plates, L L, at the rear edge, which plates are linked together and form a chute to guide the nickels into either of the two boxes H H. This is especially designed where it is desired to keep the fares for each trip going and returning separate. The plates L L are turned forward or backward by means of an elbow-lever, M, connected with them and pivoted within one of the side pieces, the end of said lever projecting on the rear side of the box. It may here be remarked that with the rear side I mean the side toward the driver, and with the front side the side toward the passengers. In the space between the two glass plates D D' are arranged three movable glass plates, and two which are stationary. The stationary plates O O are arranged, one immediately below and the other above the apertures *a a*, in an inclined position, to conduct the nickels against the rear plate D'. The other plates, P, P<sup>1</sup>, and P<sup>2</sup>, are each attached to arms *e e* extending downward from a shaft, *f*. The three shafts *f f* are pivoted, one above the other, in the side pieces A A, and each shaft is provided with a crank, *h*, the end of which extends through a slot in one of the side pieces, and through a slot in a lever for operating it. R, R<sup>1</sup>, and R<sup>2</sup> are the respective levers, which are



pivoted to the side piece A, and project on the rear side thereof. These levers pass through slots in a sliding bar, *m*, the slots for the two upper levers R and R<sup>1</sup> being long enough to allow said levers to be operated without moving the sliding bar; but the slot for the bottom lever R<sup>2</sup> is just large enough for it to pass through, so that when this lever is raised the sliding bar will be moved upward, and thereby simultaneously operate the levers R R<sup>1</sup>. These two upper levers are provided with springs *i i* for throwing them down. No spring is necessary for the lever R<sup>2</sup>, for the springs of the other two levers will throw this lever down through the medium of the sliding bar *m*. The springs *i i* holding these levers down cause, through the medium of the cranks, shafts, and arms mentioned, the plates P, P<sup>1</sup>, and P<sup>2</sup> to be held in an inclined position, with their lower edges against the rear plate D'. The nickels, being dropped through the apertures *a*, are conducted by the plate O so as to fall on the plate P, and be held by it against the plate D'. The driver, by raising the lever R, throws the plate P backward, allowing the nickels to drop down onto the second plate, P<sup>1</sup>.

A detective employed by the company is supposed to enter the car at any desired point, and will compare the number of fares on the plate P<sup>1</sup> with the number of passengers, and then, raising the lever R<sup>1</sup>, causes the nickels to fall down to the plate P<sup>2</sup>, where they remain till the end of the route. Any fares received after the detective has left the car will be allowed to remain on the end plate P<sup>1</sup>. At the end of the route the person designated for that purpose will raise the lever R<sup>2</sup>, and thereby cause all the nickels to drop down into one of the boxes H.

It will be noticed that the slots in the levers R R<sup>1</sup> R<sup>2</sup>, through which the cranks *h h* pass, are made in such a manner that when the lever R<sup>2</sup> is raised the two upper plates P and P<sup>1</sup> will first be operated, allowing the nickels on

the plate P to fall down to the plate P<sup>2</sup> before this latter is raised to allow all the nickels to drop down in the box.

All the levers, springs, and the sliding bar in the side piece are covered and protected by a piece, A'.

On top of the fare-box thus constructed is attached another box, S, which has a hood or extension, S', at the rear, said extension being provided with a glass plate, T, in the bottom. Within the box is a lamp, V, and a reflector, W, so arranged as to throw the reflection of the light downward through the glass plate T upon the rear plate D' of the fare-box, to enable the driver or other person to see the contents thereof.

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

1. The fare-box herein described, consisting of the side pieces A A with dovetailed top B and bottom C, blocks E G G', glass plates D D' I, and door J, all as and for the purposes herein set forth.

2. In combination with the side pieces A A, the screw K having the square part *x*, the stationary plate *b*, and movable plate *d*, all substantially as and for the purposes herein set forth.

3. The hinged or movable chute L, operated by means of the lever M, for the purposes herein set forth.

4. The combination of the glass plates P P<sup>1</sup> P<sup>2</sup>, rock-shafts *f f* with arms *e e* and cranks *h h*, the slotted levers R R<sup>1</sup> R<sup>2</sup>, springs *i i*, and slotted sliding bar *m*, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony whereof I have hereunto signed my name.

TOM L. JOHNSON.

Witnesses:

TOM J. MINARY,  
A. JENKINS.