

(No Model.)

G. W. HORNE.  
Fare Box.

**No. 232,719.**

**Patented Sept. 28, 1880.**

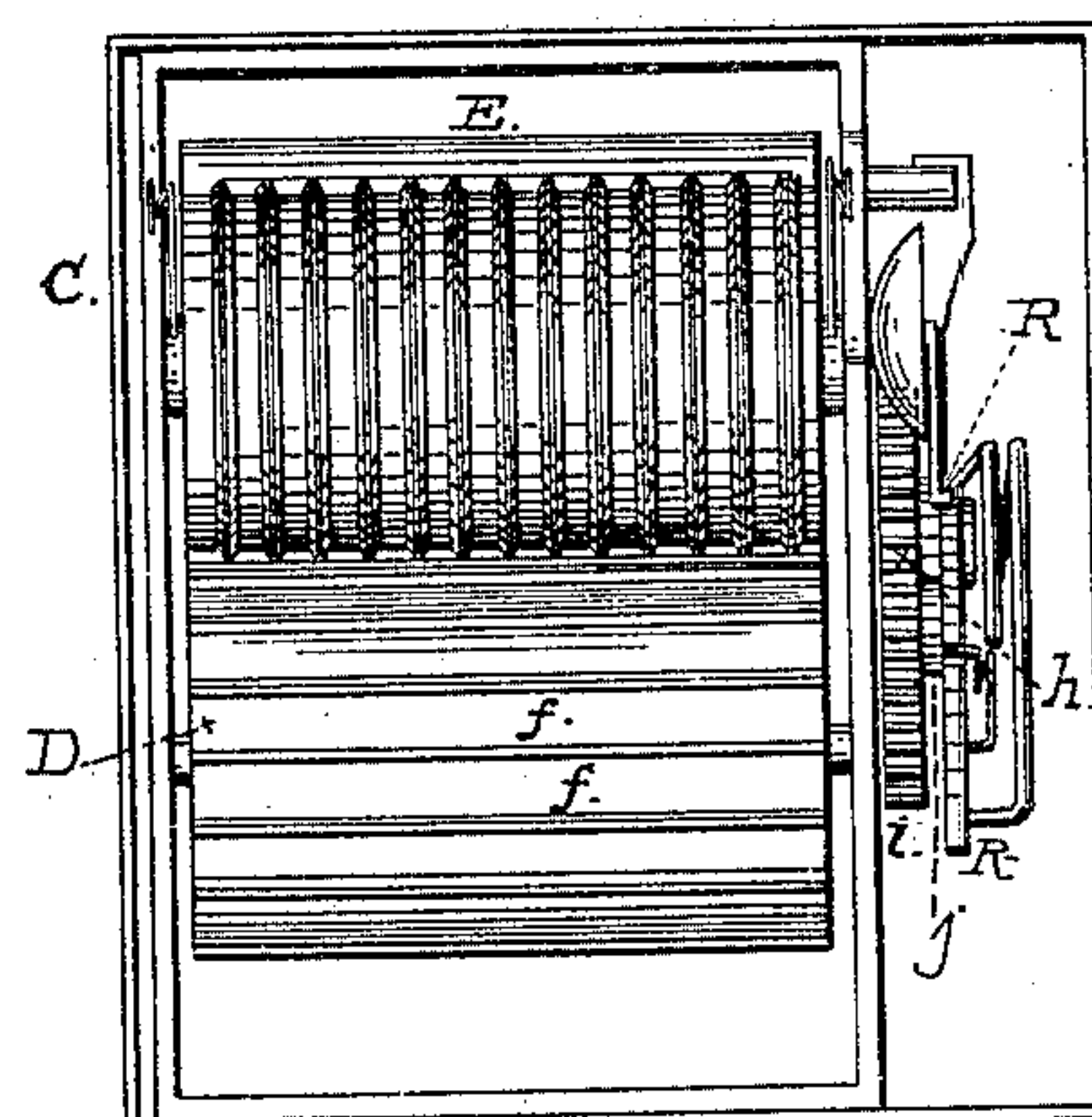
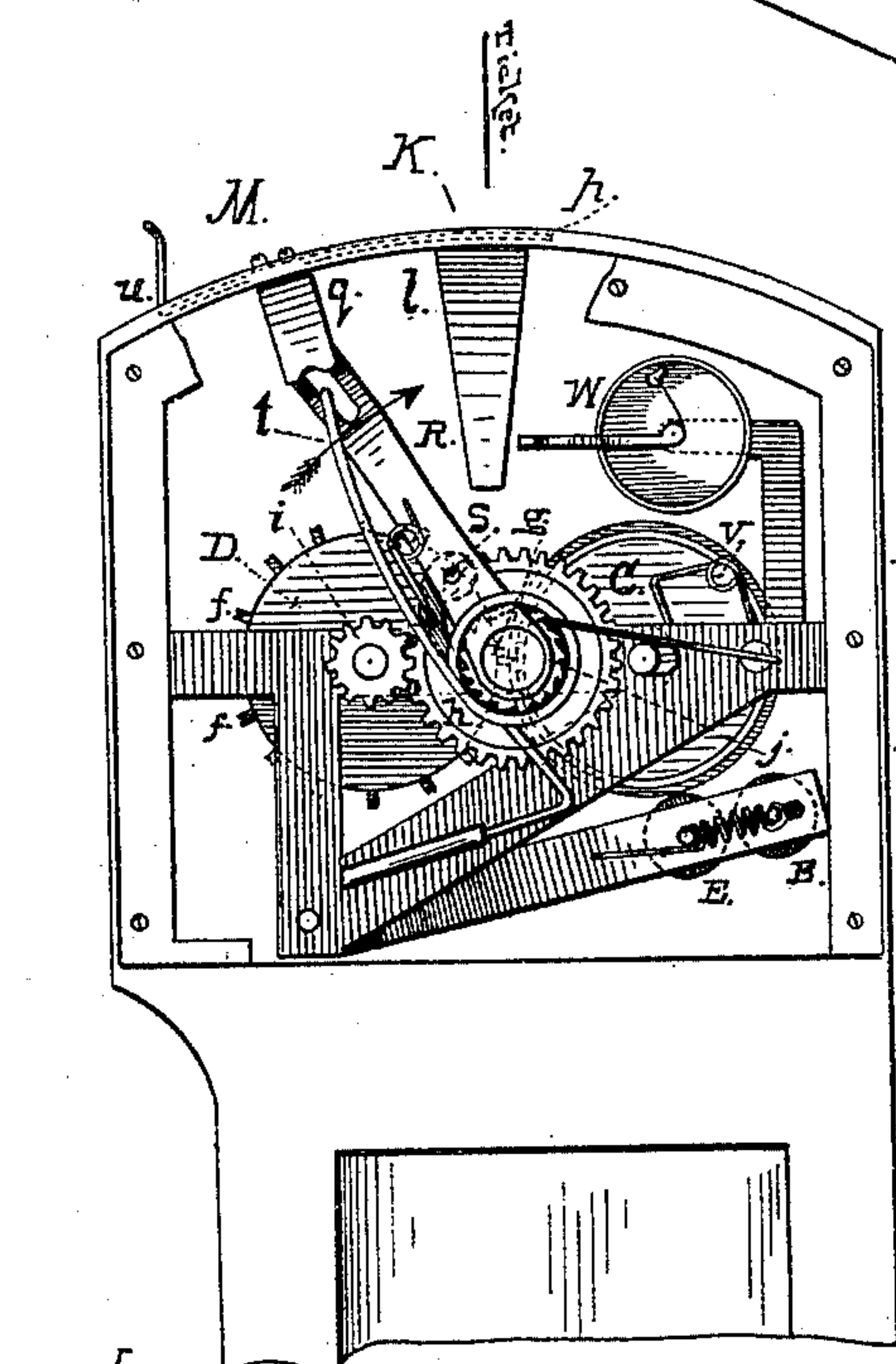
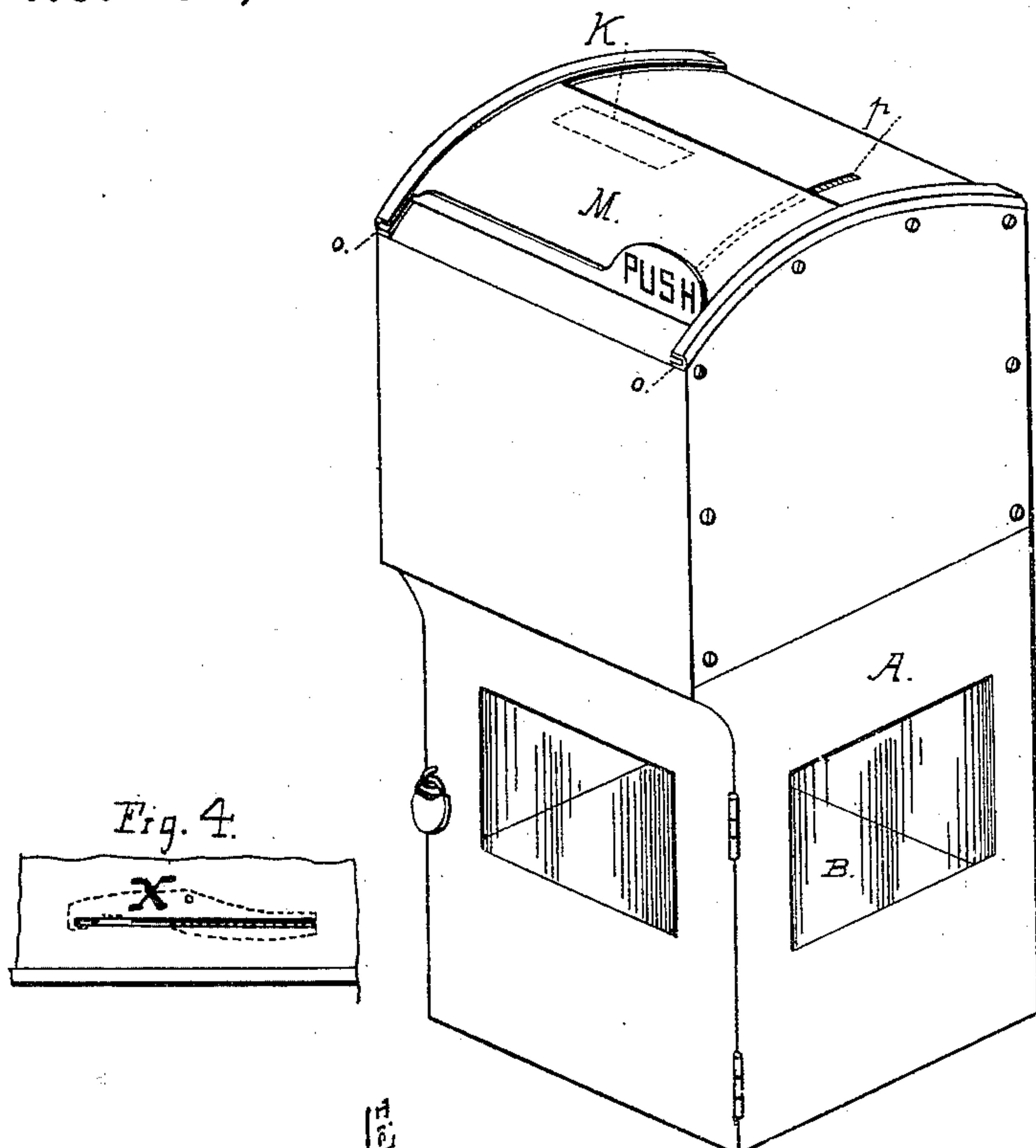


Fig 3.

Inventor:

George W. Horne.

By his Attys Boone & Aborn.

Witnesses:

Witnesses:  
Jno L Boome  
Wm A Blake



# UNITED STATES PATENT OFFICE.

GEORGE W. HORNE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-FOURTH OF HIS RIGHT TO JAMES A. MARS, OF SAME PLACE.

## FARE-BOX.

SPECIFICATION forming part of Letters Patent No. 232,719, dated September 28, 1880.

Application filed July 20, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. HORNE, of the city and county of San Francisco, in the State of California, have invented certain new and useful Improvements in Fare-Boxes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings.

My invention consists in combining an automatic marking device with a receiving-box, into which fares and other tickets are deposited or collected, so that each fare will be marked or canceled as it enters the box.

For the purpose of this specification I have represented my invention as applied to a stationary fare-box for street-cars, into which the tickets or fares are deposited by the passengers; but it can be applied to any kind of a collecting-box. The opening into which the fare or ticket is to be deposited I cover with a slide, which must be pushed back to uncover the opening and permit the introduction of the fare or ticket. The marking device is connected with and operated by this slide, so that each time the slide is moved back after depositing a ticket the marking or canceling device is set in motion, so as to mark or mutilate the fare or ticket as it passes down to the inspecting-floor.

Referring to the accompanying drawings, Figure 1 is a perspective view of a fare-box with my invention applied to it. Fig. 2 is a side view of the upper part of the box with the plate removed to exhibit the interior mechanism. Fig. 3 is a top view of Fig. 2. Fig. 4 shows the slot-closing plate.

A is a fare-box having one or more glazed sides and a tilting inspecting-floor, B, in the usual manner of constructing stationary fare-boxes for street-cars.

In the upper part of the box I mount a pair of rollers, C D, side by side, in a suitable frame, so that they extend across the box directly below the opening in which the ticket or fare is deposited. The roller C is covered with india-rubber or other suitable elastic substance, the surface of which is cast or formed in any desired pattern. I prefer to make numerous grooves close together, so as to form a number of raised ribs extending entirely around

the roller parallel with each other. Underneath or beside this roller I mount two distributing and inking rollers, E E, against which the edges of the ribs press as the rollers rotate, in order to ink the rims of the ribs. The roller D has longitudinal ribs *f*, the edges of which are grooved, as shown. The two rollers are adjusted to press against each other, so that any substance that passes between them will be pressed by the longitudinal ribs against the circular printing-ribs and receive an impression from the inked rims.

A short stationary shaft, *g*, projects from one side of the roller-frame, and on this shaft a sleeve is slipped, which sleeve has a spur-wheel, *h*, and a ratchet-wheel, *j*, secured upon it. The spur-wheel *h* engages with a pinion, *i*, on the projecting end of the roller D, so that when the sleeve and spur-wheel are rotated the roller D is also rotated, and the pressure of its longitudinal ribs *f* against the circular ribs on the roller C will cause that roller to rotate also.

The opening K in the top of the box in which the ticket or fare is deposited is directly above and parallel with the two rollers C D, and a tube or spout, *l*, leads from this opening, so as to drop the fare or ticket between the two rollers. A slide, M, is arranged on the top of the box so that it covers the ticket-opening K, and in order to expose the opening this slide or cover must be pressed back until the opening is uncovered. The edges of this slide move in and are guided by grooves *o* in the projecting sides of the box. A slot, *p*, is made in the top of the box directly above the ratchet-wheel *j*, in line with the movement of the slide, and an arm, *q*, projects from the under side of the slide down through the slot. A lever, R, has one end secured loosely on the shaft *g* alongside the ratchet-wheel *j*, while its opposite end is slotted, so as to embrace a pin on the arm *q* of the slide. A pawl, S, is attached to this lever, so as to engage with the ratchet-wheel after the slide and lever have been pushed back. A spring, *t*, is arranged to press the lever forward again after the pressure on the slide has been removed.

The slide M has an ear, *u*, turned upward



near its right-hand corner, against which the person who desires to deposit a ticket will press with the back of his hand, so as to push the slide back and uncover the ticket-opening.

5 This carries the lever R and pawl S back and compresses the spring *t*, and the pawl drops into the teeth of the ratchet. The ticket is then dropped into the opening, and is conducted by the tube or spout *l* so that it falls  
10 between the rollers C D. The passenger then releases the slide, when the spring will force it back to its original position, and at the same time the pawl carries the ratchet-wheel around, causing the rollers to rotate and carry the  
15 ticket through between them. During its passage between the rollers the ticket is marked, branded, or mutilated, so that it is effectually canceled. It then falls upon the inspection-floor B, where it is inspected by the driver  
20 through the small windows, and if satisfactory is dropped through into the compartment below in the usual way.

The bearings in which the journals of the roller C are supported are slotted, and a spring,  
25 V, presses the roller C against the opposite roller, D, so that the roller C will yield to tickets or coins of different thickness. A bell or gong, W, is mounted inside the box, and is operated by the lever R as the slide moves  
30 back, so as to sound an alarm and notify the passengers and the driver that a fare has been deposited. A register could also be applied and operated in the same way.

35 The end of the slot *p* will be uncovered when the slide is closed, and the other end when it is open. To close this slot I use an automatic

switch, X, which is operated by the arm *q* as it moves through the slot. This switch is made in the shape of two crescents united at their ends. It is pivoted at its middle opposite the  
40 middle of the slot, so that in whichever direction the slide moves the arm *q* strikes the curved edge of the part which covers the opposite end of the slot, and throws the switch so as to cover the part which is being exposed. 45

Two or more pairs of printing-rollers could be mounted one above another, if desired, so that the tickets or fares would pass between each of them before falling on the inspection-floor; but usually a single pair will be all that  
50 is required. This arrangement effectually cancels every ticket or fare, so that it is useless afterward, thus removing all inducements for any one to tamper with the box. The entire operation is performed by the passenger by  
55 the act of depositing his fare, so that there is no chance for the ticket to escape being canceled.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is— 60

The inking or canceling rollers C D, mounted below the fare-opening K in the box and rotated by means of the slide M, lever R, pawl S, ratchet *j*, spur-wheel *h*, pinion *i*, and spring  
65 *t*, substantially as specified.

In witness whereof I have hereunto set my hand and seal.

GEORGE W. HORNE. [L. S.]

Witnesses:

WM. F. CLARK,

EDWARD E. OSBORN.