

R. M. ROBINSON.

Fare-Boxes.

No. 158,982.

Patented Jan. 19, 1875.

Fig. 1.

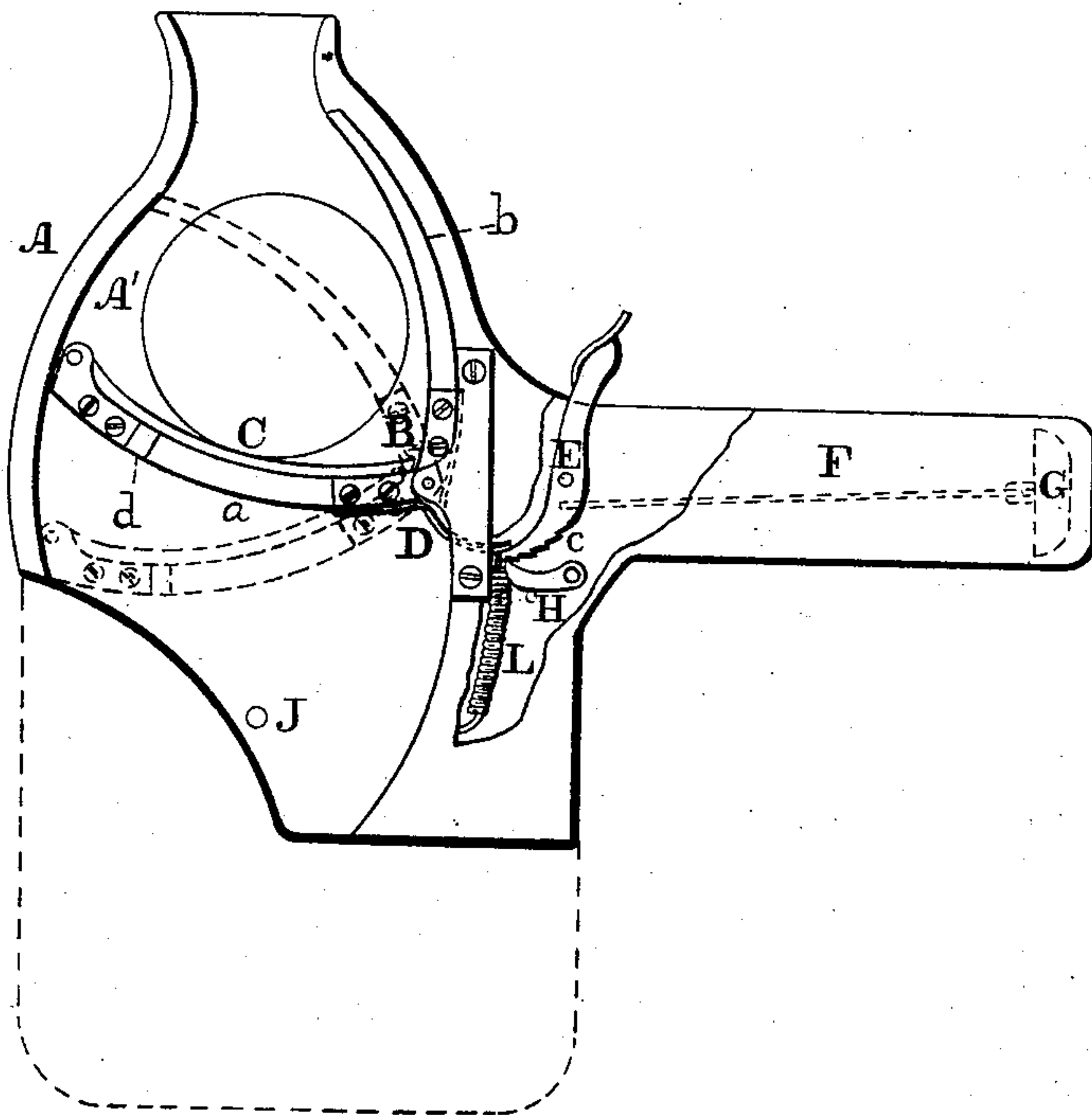


Fig. 2.

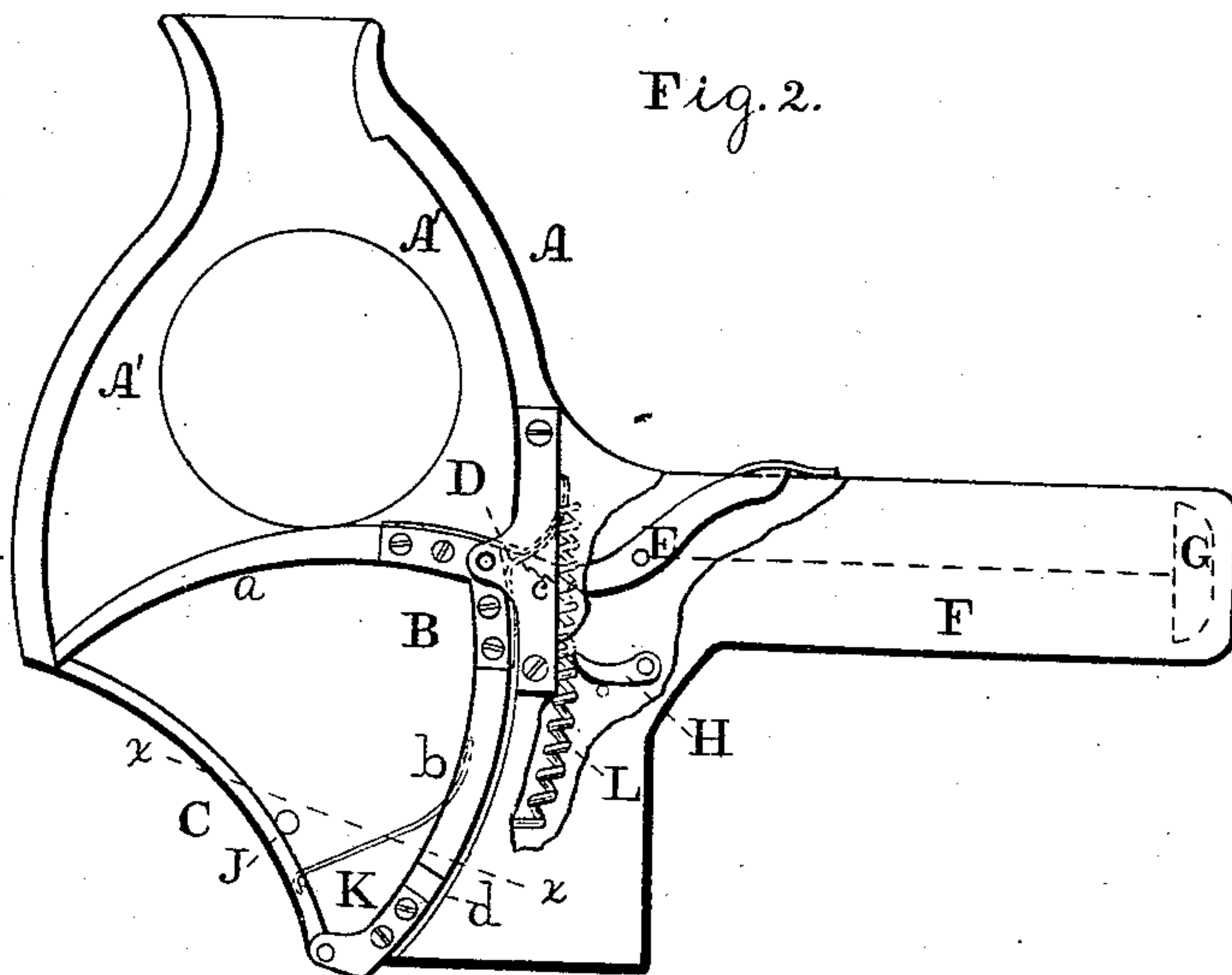
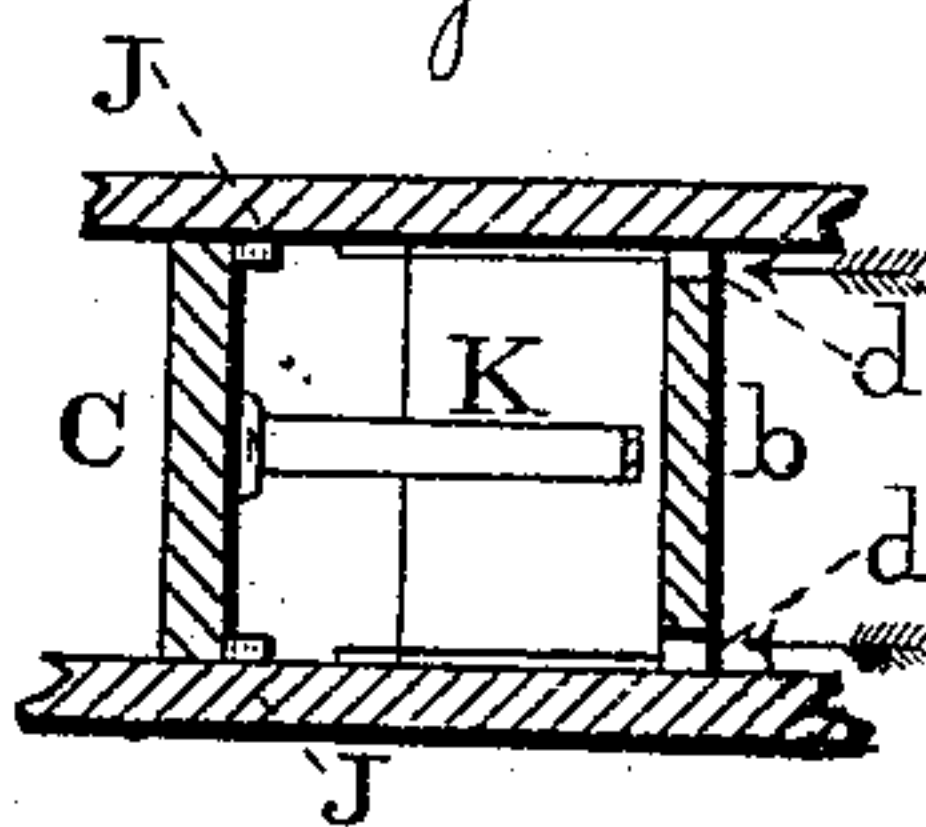


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN FARE-BOXES.

Specification forming part of Letters Patent No. **158,982**, dated January 19, 1875; application filed October 13, 1874.

CASE B.

To all whom it may concern:

Be it known that I, R. MILES ROBINSON, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Fare-Boxes; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a sideview of the interior of the device embodying my invention. Fig. 2 is a similar view, showing the operation thereof. Fig. 3 is a horizontal section in line *xx*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a leaf, constructed of two plates, which curve inwardly, and are angularly connected to each other, so that the hopper or mouth of the receiver will be closed upon only a partial descent of the leaf, the vertical plate of the leaf performing a hopper-closing operation in advance of the fare-discharging operation of the trap upon the horizontal part of the leaf, so that while a stick or some other implement might be employed to hold open the vertical plate to attempt the abstraction of fares, the location of the horizontal plate or part of the leaf with the trap lying thereon closes all gap between the hopper and bottom portion or receptacle of the receiver, and foils any attempt at abstraction of previously-received fares. To the outer edge of the horizontal plate or part there is jointed a trap, which rests on the said plate or part of said leaf until the fare has been nearly discharged by its own gravity, the trap then moving in the arc of a circle and its free end traversing the length and sweeping the face of the vertical plate of the leaf to its full extent, thereby insuring a complete and clear discharge of fare from the leaf and sides of the receiver, and fully closing the bottom or opening to the fare-receptacle below. It also consists in means for opening the trap. It also consists in means for opening and closing the trap. It also consists in

means for preventing the return of the leaf when the receiver is inverted.

Referring to the drawings, A represents the body of the receiver, whose inner faces are curved inwardly, as at A', and within which is hinged an axial leaf, B, which consists of two plates, *a b*, of equal length, secured to each other angularly, and curved inwardly toward each other, their free ends being separated from each other at a distance equal to the length of either plate. In lieu of the plate *b* one or more arms may be employed, but the service of the arm or arms will be the same as that of a plate. To the other end of the plate or part *b* there is hinged or jointed a trap, C, whose free end, when in its normal position, lies close to the axis of the leaf B. To the axis or axial portion of the leaf B there is secured an arm, D, which projects therefrom, and is adapted to be engaged by one or more triggers, E, hinged to the rear extension of the body A, or forward portion of the handle F. This handle is made hollow or tubular, and will receive the registering apparatus, and also the gong G, which are to be operated by the movements of the triggers E. One of the triggers E will have the lower edge of the portion below its axis formed with teeth or serrations *c*, with which is adapted to engage a dog, H, pivoted to the contiguous part of the receiver or handle, below the said triggers E, said engaging operation taking place upon the inversion of the receiver, the dog falling by gravity and dropping into one of the notches of the trigger. J represents a stud, which is secured to the lower portion of the side of the receiver, and is adapted to have the trap C come in contact therewith on the descent of the leaf B. To accomplish this, the plate or part *b* of the leaf B is slotted or grooved, as at *d*, at a point or place near the junction of the trap C with said plate or part *b*, so that the plate or part *b* is permitted to pass the stud J whereby, when the said trap bears against the stud and continues its motion, said trap is thrown out from the plate or part *b*, and, sweeping the adjacent face of the plate *a*, its free end joins the free end of the plate *a*, as seen in Fig. 2.

It is evident that a stud may be provided for each of the sides of the receiver, in which case a corresponding slot or groove will be formed on each side of the plate or part *b*. Upon the return or ascent of the leaf B the closing of the trap C on the plate or part *b* is accomplished by the action of a spring, K, properly attached to said trap C and the leaf or part of the leaf B.

The downward or discharging motion of the leaf B is accomplished by pressure upon the trigger E through the medium of the arm D, and the upward or return motion is caused by a spring, L, which is connected to the leaf B, and to a proper portion of the receiver or to the axis of said leaf B.

The operation is as follows: The conductor, grasping the handle of the receiver, presents it to the passenger, who deposits the fare upon the face of the trap C through the opening at the top of the receiver, whereupon the conductor (after inspecting the fare through the sides of the receiver or through the plate *a*, which will be partly formed of mica or other suitable transparent material) presses down the trigger E, the lower portion thereof forcing up the arm D, thus depressing the leaf B. Upon the descent of the leaf, and the plate or part *b* of the leaf B passing the stud J, the trap C is made to perform the arc of a circle and sweep the fare clear of the sides of the receiver and the leaf B into the proper receptacle below. The trap C now closes the bottom of the receiver, and in the event of inversion of the receiver prevents the return of the discharged fare, the dog H engaging with the serrations of the trigger E, thus locking the trigger and the leaf B, which, in turn, renders stationary the trap C or causes it to remain in position across the bottom of the receiver or mouth of the receptacle below the same. Access from above or through the top opening to the discharged fare below is shut off by means of the plate *a*, which has as-

sumed a horizontal position, and, furthermore, by the trap C in position, as has been stated. Upon releasing the trigger E the leaf B is returned to its normal position by means of the spring L, and the trap C to its normal position partly by its own weight and partly by means of the spring K.

It will be observed that the spring K is used to prevent the falling out of the point or end of the trap C beyond the moving point of the leaf *a*, and at the same time facilitate its return to its place upon the upper face of the leaf or part *b*. The pressure upon, or the release of, the trigger will impart the necessary movement to the registering apparatus located in the handle, and also strike the gong therein, so that the discharge of the fare will be registered and indicated, all, or nearly all, of the necessary registering and indicating mechanism for this purpose being located in the handle.

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

1. The leaf B, constructed of two plates or parts, *a b*, in combination with the trap C, hinged to one of the plates or parts, substantially as and for the purpose set forth.
2. The stud J and part *b*, with slot or groove *d*, in combination with the trap C, substantially as and for the purpose set forth.
3. The closing-spring K and trap C, in combination with the part *b*, with groove *d* and the opening-stud J, substantially as and for the purpose set forth.
4. The combination, with a fare-receiver, of the trigger E, formed with serrations *c*, and the dog H operating therewith, substantially as and for the purpose set forth.

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Witnesses:

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