

T. L. JOHNSON.

Improvement in Registering Fare-Boxes.

No. 132,535.

Patented Oct. 29, 1872.

Fig 1

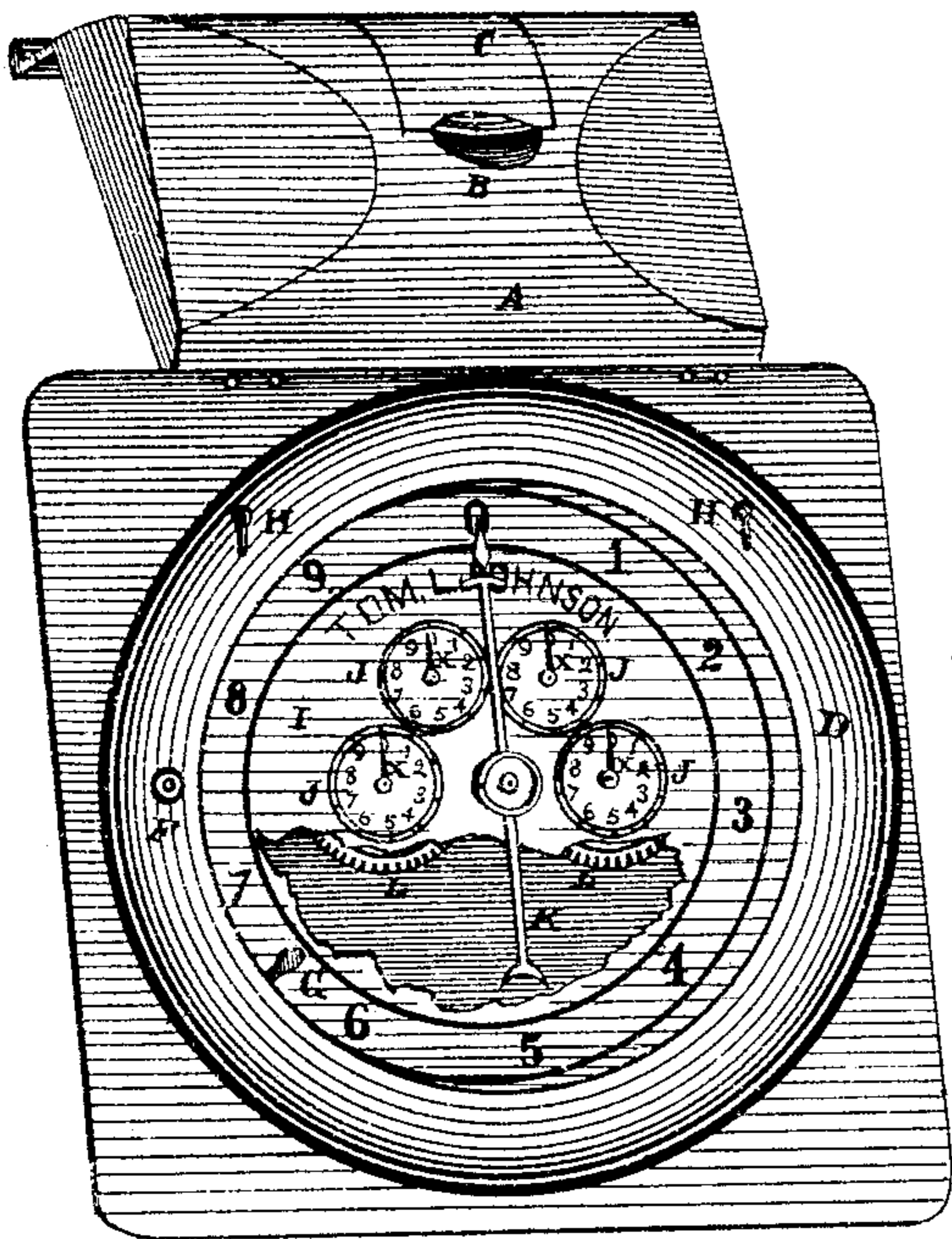


Fig 2.

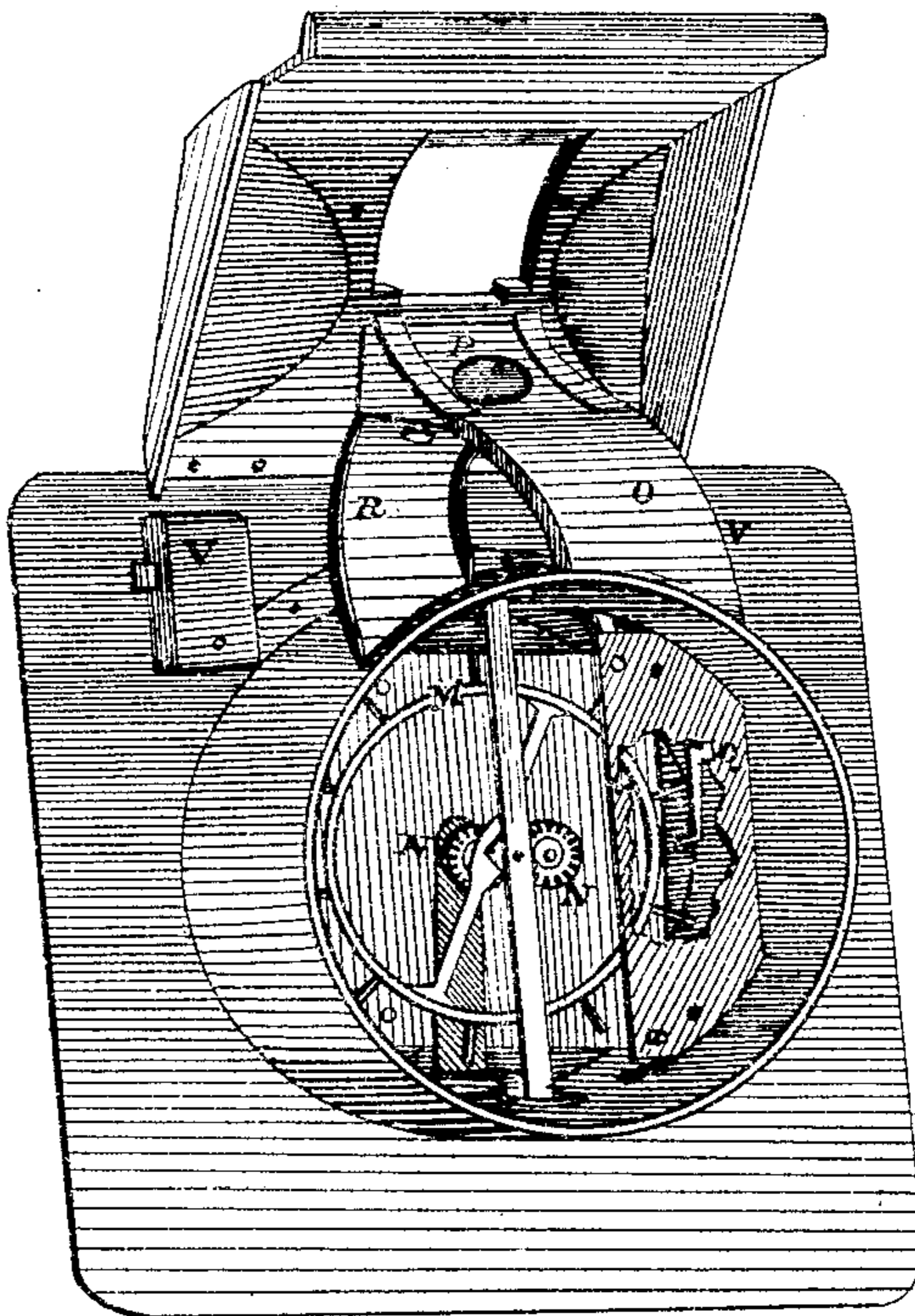


Fig 3.

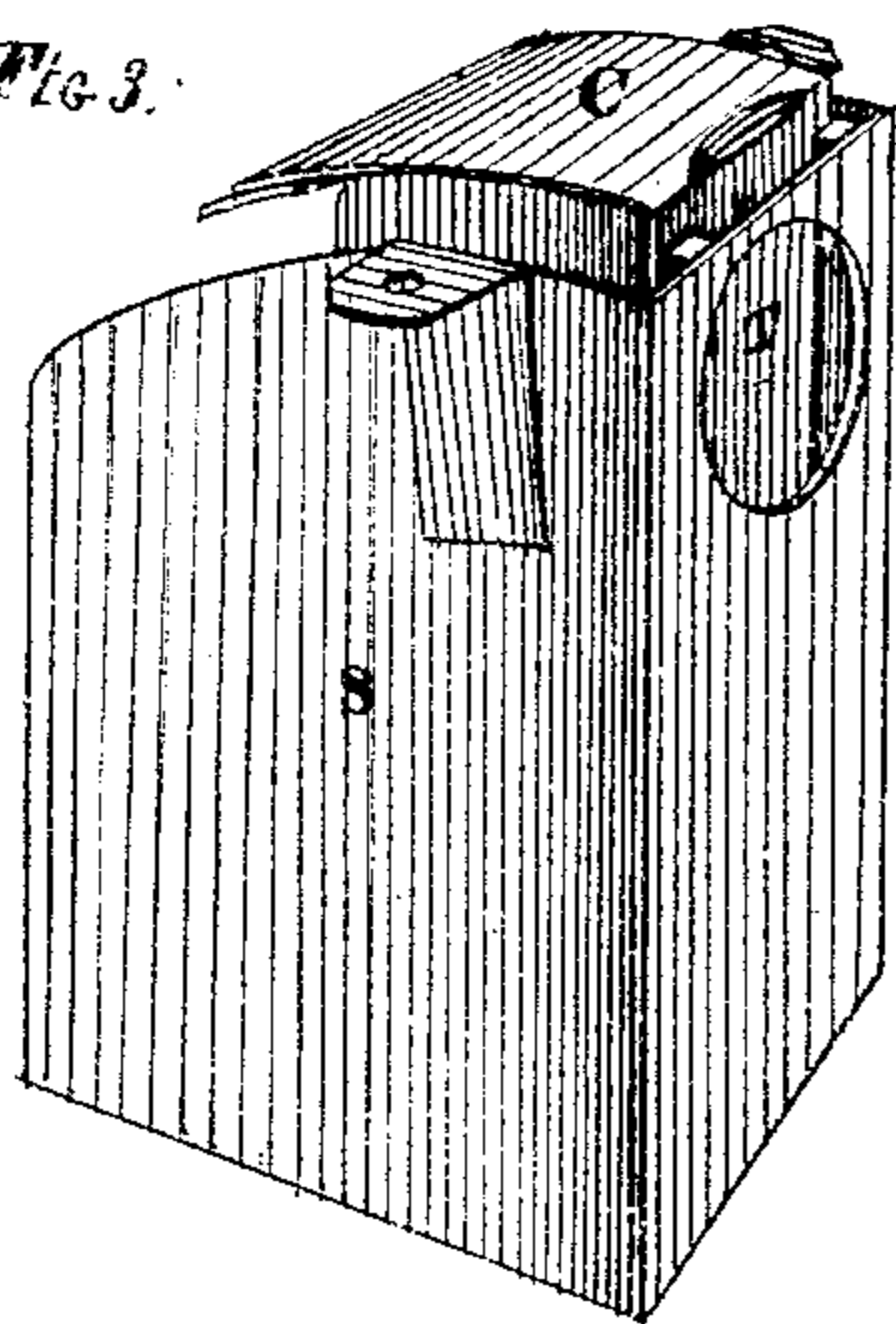
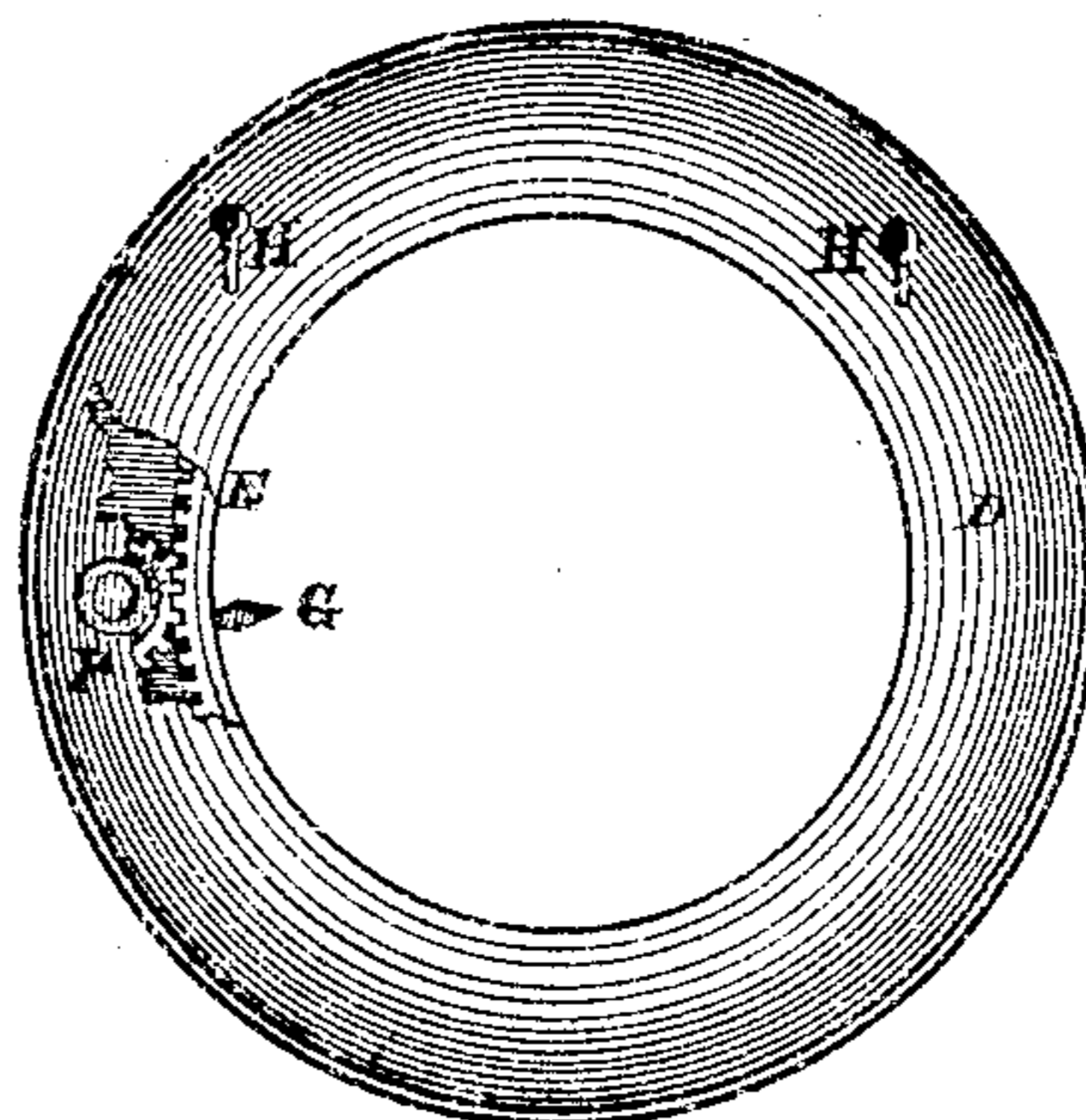


Fig 4.



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IMPROVEMENT IN REGISTERING FARE-BOXES.

Specification forming part of Letters Patent No. **132,535**, dated October 29, 1872.

To all whom it may concern:

Be it known that I, TOM L. JOHNSON, of the city of Louisville, county of Jefferson and State of Kentucky, have invented certain Improvements in Box or Addition to Fare-Boxes used on street-cars, of which the following is a specification:

The first part of this my invention consists in a device for preventing fraud in the payment of fares, by means of which no other kind of money can be used except the nickel five-cent piece intended, or any other coin of exactly the same size, as no other coin of larger diameter will enter the opening in the box, and a smaller one will fall through the hole in the bottom of the conducting-chute and pass out into the box in another direction without being counted, (paper money not being used in the payment of fare.) The second part of my invention relates more especially to the series of devices used for registering the number of nickels or fares deposited, by means of which it can be seen, by reference to the figures on the face of the dials, how many fares have been deposited, and by counting the number of passengers in the car a discrepancy will be easily detected. The object of this my invention is, first, to prevent any other except the right kind of coin from being deposited, and also to prevent passengers from attempting to ride without paying, and as a means at all times available to the company for detecting fraud when the money has been paid to the driver or otherwise, and not deposited in the box. It is also intended to be used for the purpose of detecting any money that may be taken from the boxes when the cars are laid up at night or at other times, as the amount that should be in the boxes will be at all times shown by the figures on the dials, indicated by the hands thereon, the indicator-point that shows where the main index-hand stood when starting from the station, in connection with the ring on the face, being securely locked to prevent access to the interior by any persons except the collector having the necessary keys to open it.

Figure 1 is a perspective view of the box, showing the face and opening near the top where the money is deposited, and also the figures on the dials, by which the same is registered, and also the general arrangement of the

wheels, by which the hands are operated. Fig. 2 is a view of the back of the box, showing the arrangement of the money-chutes or conductors and the wheel for counting the coin as it passes through. Fig. 3 is a view, showing the box and cover over the opening where the money is deposited, and also the first hole through which the coin falls into the chute.

In the drawing, A is the box or casing, all of which is made of metal, and in form as shown in the drawing. B is the opening in which the money is deposited. C is a cover above this opening, and is hinged to and forms a part of the money-chute, and is held in its place by a spiral spring at the back, but is susceptible of being raised or pressed back in order to take out any objectionable coin, paper money, or other article deposited by mistake or otherwise that will not pass through into the box. D is the ring and glass cover of the face. This ring is held in its place by means of a screw cut on the flange raised on it and the front of the case. E is a ring, working loosely around the edge of the glass. This ring is provided with cogs or teeth around the edges. F is a small pinion working into it for the purpose of turning it. This last-named ring E has a small hand or pointer secured to the side next the glass, so as to be easily seen in front, and is used to indicate the point at which the principal index-hand stood at the end of the road or station, and also when the car started, it being set and locked at each starting-point. G is the small hand or pointer. H H are the key-holes, by which it and the outside rings are locked when set. I is the principal dial-plate of the face, and made as shown in the drawing, except that a part is left out so as to show the wheels below, by which the hands are operated, there being four in number, all of the same size, gearing into small pinions on the several shafts, similar to that of a common clock. J J J J are small dials formed on the face of the large one, similar to a gas-meter. K is the principal index-hand, which is so arranged as to indicate one on the dial for every nickel or fare deposited to the number of ten, and any additional number required will be indicated by the hand of the small dial to the right, and will continue to be multiplied by the others in the

same manner as that of the ordinary gas-meter; but if necessary the numbers on the principal dial-plate may be increased for convenience or otherwise. L L are the small wheels and pinions which operate the index-hands. M is the wheel by which fare is counted, and by means of which the device is operated. This wheel is hung in the case in such a manner as that one side of it is made to work in an opening in the side of the money-chute, and is provided with ten flat arms, secured to the verge or face. These arms are made sufficiently wide as to nearly fill the chute the flat way, and nearly long enough to extend across it, so that when the nickel is dropped in it cannot pass through without turning the wheel, and thereby indicate the number on the face of the dial; and in order to prevent the wheel from turning too far a small catch-spring is attached to the side of the chute, which catches the arm when the nickel has passed it, but is again detached by next nickel which falls into it, permitting it to pass in like manner. N N are the pinions by means of which motion is transmitted to operate the index-hands. O is the upper or principal money-chute. P is the hole through which the fraudulent coin is made to fall and pass into the chute below without being counted; and no coin larger than a nickel can be deposited, the hole being too small to let it pass through. Q is the spring of the counting-wheel. R, Fig. 2, is the lower chute by which fraudulent or other coin is conducted into the box without being counted. S, Fig. 3, is the box forming the cover of the upper chute. In Fig. 3 of the drawing this box is shown detached from the fare-box, in order to show the hinged cover and hole through the under side, which connects it with the chute below. T is the hole through which the coin falls into the chute. These holes are made so that nothing larger

than a nickel five-cent piece can pass through the first one; but will not drop through the next one below, but pass down the said chute through the chute and be counted; the lower hole, being too small to admit it, will permit any coin of slightly smaller dimensions to pass through into the box without counting. V V are the lock by which the ring D and pointer-hand G is locked when set, in order to prevent any change to be made except by the proper persons having the keys.

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

1. The combination of the several devices for preventing the use of fraudulent or other coins from being used in the payment of fare, as above described, consisting, first, of the box A with its deposit-opening B, hinged cover C, box S, and money-hole T; also the chutes O and R, with the hole P near the entrance, when arranged, constructed, and operated substantially as and for the purpose set forth.

2. The devices in the former claim in combination with the several parts constituting the device for registering the number of fares deposited in the box, which will at the same time show the number of paid passengers in the car, as above described, consisting first of the registering-wheel M with its pinions and wheels L L and N N by which the index-hands are operated; also the dials I and J J J J with their hands K and X X X X; also, the ring D with its toothed-wheel E, pinion F, indicator-point G, and locks V V by which the hand and ring are locked when set, when arranged, constructed, and operated substantially as and for the purpose hereinbefore set forth.

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Witnesses:

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