

S. W. FRANCIS.

Fare-Box.

No. 166,598.

Patented Aug. 10, 1875.

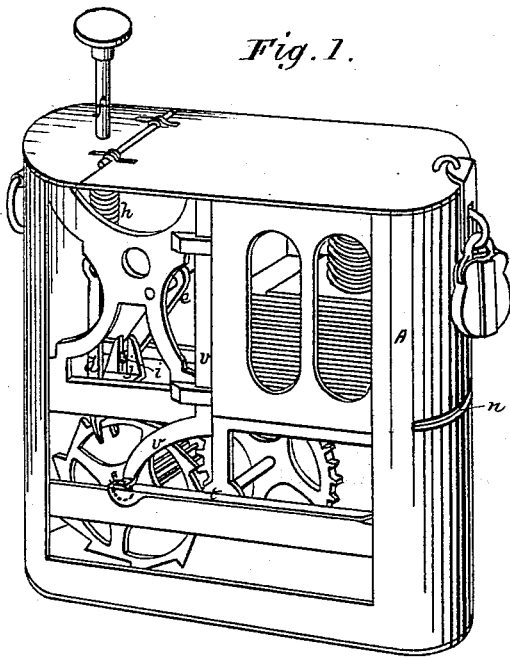


Fig. 1.

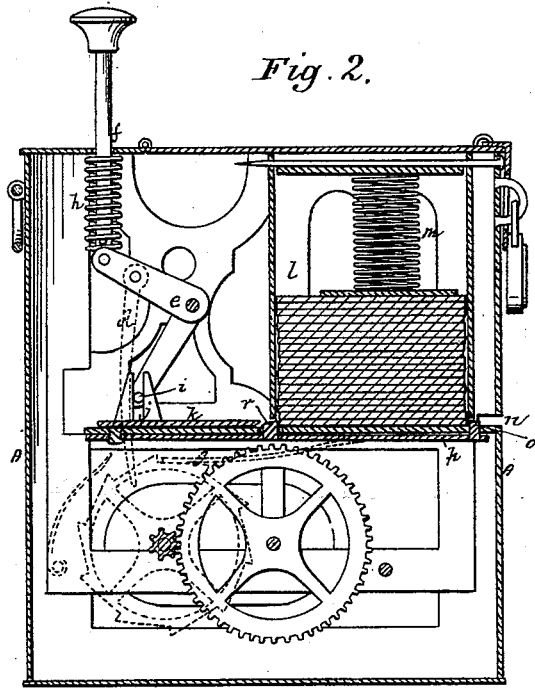


Fig. 2.

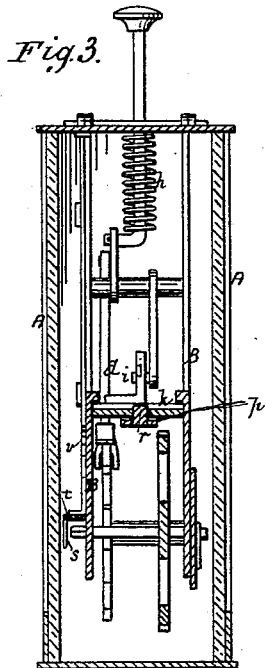


Fig. 3.

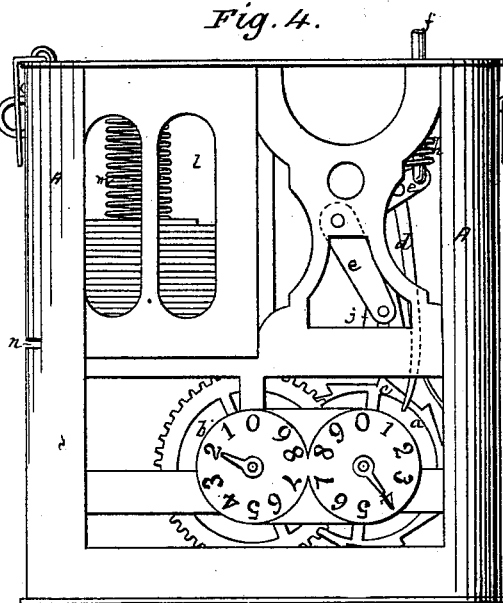


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

SAMUEL W. FRANCIS, OF NEWPORT, RHODE ISLAND.

IMPROVEMENT IN FARE-BOXES.

Specification forming part of Letters Patent No. **166,598**, dated August 10, 1875; application filed June 14, 1875.

To all whom it may concern:

Be it known that I, SAMUEL W. FRANCIS, of Newport, Rhode Island, have invented a new and Improved Box for Fares and other purposes, of which the following is a specification:

The register to which my invention relates is what may be termed a detective-register. It is designed to deliver a coupon, ticket, or check at the same time that it registers the unit of which such coupon, ticket, or check is a token. The detective-register is valuable for registering car-fares; but it can be equally well used in restaurants, barber-shops, ticket-offices, &c., and for registering loads of wood, coal, grain, or other material requiring to be carted.

My improvements relate to means for preventing accidental escape of tickets and for preventing unauthorized access to the winding arbor of the registering-train.

The nature of my invention and the manner in which the same is or may be carried into effect will be understood by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a registering apparatus embodying my invention. Fig. 2 is a longitudinal vertical central section of the same. Fig. 3 is a transverse vertical section. Fig. 4 is an elevation of the side opposite that exposed in Fig. 1.

The case A that incloses the works may be of any suitable structure and form. The case shown in the drawing has glass sides. Within the case is a frame, B, that sustains the working parts. In the lower portion of the frame is supported a suitable registering-train, consisting, in this instance, of a unit-wheel, *a*, and a ten-wheel, *b*, each with suitable dial and index, and geared together, as shown. On the shaft of the unit-index is a ratchet-wheel, *c*, which is advanced one tooth for each fare registered. This movement may be effected in any suitable way. In this instance it is accomplished by means of an advancing pawl, *d*, hung by a pivot to the upper arm of a bell-crank lever, *e*, to the upper end of which lever is jointed the sliding rod *f*, which projects above the top of the case, and is provided with a knob or push-button. The depression of this rod will cause the movement of the unit

ratchet-wheel. A retaining-pawl, *g*, holds the ratchet-wheel in place against any back movement. When the rod *f* is relieved of pressure it is thrown up by a coiled spring, *h*, or other suitable means.

The lower end of the bell-crank *e* carries a laterally-projecting pin, *i*, that works in a slotted upright, *j*, attached to the sliding plate *k*, which moves in suitable guides in the frame B, and constitutes the pusher or shover hereinbefore referred to. When the rod *f* is depressed this shover is pushed forward. In front of the shover is a receptacle, *l*, containing tickets, coupons, or checks, which are pressed down onto the floor of the receptacle by a spring, *m*. The receptacle at front and rear, at the junction of its bottom and sides, has a slot of sufficient dimensions to permit the passage on the one side of the pusher and the passage on the other side of a check. In the wall of the case A is a corresponding opening or slot, *n*, through which the ticket or check is discharged.

When the knob is depressed the registering-train registers one, and at the same time the shover pushes from the check-receptacle a check, which is projected from the slot *n*, and can be then removed from the case and put to the use for which it is intended. To prevent accidental escape of the checks the front slot or opening is closed by a stop or gate, *o*, which is attached to a spring-plate, *p*. The spring is provided with a stud or projection, *r*, that lies in the path of the beveled front end of the shover. The latter, as it advances, depresses the projection, thus causing the lowering of the spring and the withdrawing of the gate or stop *o*. Under this arrangement the gate is operated directly by the pusher, which removes the gate before the coupon reaches it, and thus acts with certainty to open a path through which the coupon or ticket may pass without obstruction.

One end of the unit-arbor is squared to receive a key, by which it may be rotated, so as to set the train or bring the hands to zero, or any point required. The aperture for the insertion of the key is formed in the side of box. To close this aperture and prevent tampering with the register any suitable device may be used. The device in the present in-

stance consists of a shield, *s*, on the end of a spring-arm, *t*, which normally raises the shield out of the path which the key enters. But when the register is in use the shield is depressed to close this path by means of a vertical slide, *v*, whose lower end bears against the spring-arm, and whose upper end projects slightly above the top of the register-case, so that when the hinged cover *A* of the case is shut down that cover will depress the slide, and so bring the shield in position to close the key-hole. The cover is fastened by a proper lock or seal.

It will be understood that two or more sets of registering trains, pushers, and coupon-receptacles for the registering of fares or units of differing valuation may be combined in one case. The gate and key-hole shield can be used without difficulty under these conditions.

Having described my invention, what I

claim, and desire to secure by Letters Patent, is—

1. The combination of the pusher, the slotted ticket or check receptacle, and the gate or stop, normally closing the discharge-slot in said receptacle, and directly operated to open the same by the advancing pusher, substantially as shown and described.

2. The combination of the inclosing-case, its cover, the vertical slide depressed by said cover, and the key-hole shield for joint operation, as shown and set forth.

In testimony whereof I have hereunto signed my name this 20th day of May, A. D. 1875.

SAML. W. FRANCIS.

Witnesses:

J. MCPHERSON CREIGHTON,
E. M. CREIGHTON.