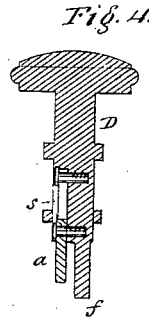
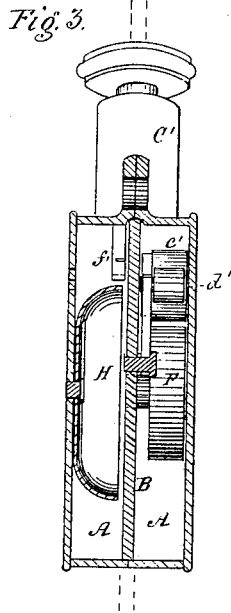
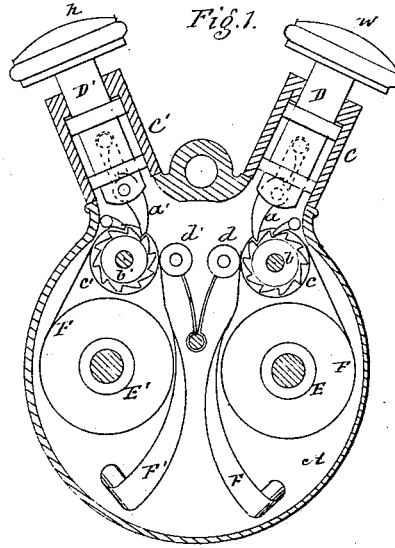
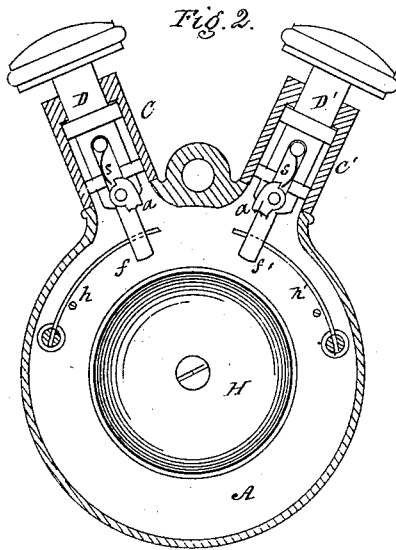


A. F. JOHNSON.
Fare-Register.

No. 167,670.

Patented Sept. 14, 1875.



Witnesses:
Wm. Thornton -
Geo. R. Barrington.

Inventor:
Albert F. Johnson.

UNITED STATES PATENT OFFICE.

ALBERT F. JOHNSON, OF PARKVILLE, NEW YORK.

IMPROVEMENT IN FARE-REGISTERS.

Specification forming part of Letters Patent No. **167,670**, dated September 14, 1875; application filed June 23, 1875.

To all whom it may concern:

Be it known that I, ALBERT F. JOHNSON, of Parkville, in the county of Kings and State of New York, have invented an Improved Fare-Registering Apparatus; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming part of this specification.

My invention relates to an improvement in devices to be carried by conductors on railroad-cars for the purpose of recording the fares received by such conductors as soon as received, and by means of this improvement each fare as soon as received is immediately recorded on a continuous strip of paper within the apparatus, and inaccessible to the person who receives the money, and the fact of such record having been made is at the same time made known by the sounding of a bell or gong, also located within the apparatus, before the party receiving the money has passed on from the passenger who pays it.

My improvements consist in the means employed for registering fares by stamping or impressing upon a continuous strip of paper within the apparatus each fare received; also, in connection therewith in improved means for striking a bell or gong within the apparatus, for the purpose of giving notice that such record has been made of each fare received, and in the combinations and arrangements of the several parts with each other so as to provide a simple and convenient apparatus to be carried by the conductor or person receiving the fares, which will indicate, without error, the number of fares and half-fares received on each trip, and will constitute an effectual check upon the return made by the conductor to his superintendent at the termination of his trip.

In the accompanying drawings, which represent an apparatus adapted for recording both fares and half-fares, Figure 1 represents a plan view, partly in section through the line 1 2, of the devices for printing or impressing on a strip of paper each fare received. Fig. 2 is a similar view, on the line 3 4, of the devices for striking the bell or gong. Fig. 3 is a transverse vertical section, and Fig. 4 is a detail view hereinafter referred to.

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

A represents the main body of the apparatus, which may be cylindrical in form, and made of any suitable metal. B is a metal plate secured within the latter, and which divides the same into two compartments, the one (shown at the right of Fig. 3) for holding the devices for impressing upon the paper the number of fares received, and the other (shown on the left of said Fig. 3) in which the bell H is located. Connected with these compartments are two cylindrical necks C and C', which are secured at their bases to the rim of the main body A of the apparatus, and within which are respectively located and fitted the plungers D D', (hereinafter particularly described,) each of which terminates in a knob, *w* and *h*, at its upper end, which are struck, the former when a full fare is to be recorded, and the latter when a half-fare is to be recorded. A pawl, *a*, pivoted within a longitudinal groove in the plunger D, and actuated by a spring, *s*, engages with a ratchet-wheel, *b*, fitted on a pin or shaft having bearings in the plate B, to which wheel *b* is attached a roller, *c*, having figures or other characters embossed on its periphery, which work in contact with a pressure-roller, *d*. A strip of paper, or other suitable material, F, held upon a roller, E, which has bearings in the plate B, is passed over the roller *c* and between it and the pressure-roller *d*, and at each stroke of the plunger D the ratchet-wheel *b* is moved the distance of one tooth, carrying around with it the roller *c*, and an impression is made on the paper, which latter passes downward and lies in the body of the box.

When the apparatus is designed to record both fares and half-fares, or different kinds of fares, a second strip of paper, F', is employed, which is operated in the same manner by the plunger D' through the medium of a duplicate set of devices, similar to those just described, consisting of roller E', impressing-roller *c'*, pressure-roller *d'*, ratchet-wheel *b'*. A projecting pin or rod, *f*, is formed on the lower end of the plunger D, on the side opposite to that on which the pawl *a* is pivoted, which, when the knob of the plunger D is

struck, comes in contact with a bell or gong, H, thereby sounding the bell at one and the same time that the impression is made on the paper. A similar pin or rod, *f'*, is formed on the plunger D', for the purpose of sounding the bell at the time a half-fare is recorded. Fig. 4 is a sectional view of the plunger. *h* *h'* are springs for retracting the plungers. The imprinting-rollers *c c'* may have embossed on their periphery any desirable figure or character to be impressed upon the paper which will designate the number of fares received, and the two coils of paper on which such impressions are made, may be of different colors, so as to distinguish more readily the fares from the half-fares.

In the drawing the ratchet-wheels *b b'* are represented as having ten teeth, so that ten impressions will be made on the paper for each revolution of the rollers *c c'*, and a convenient form of impressions would be to have nine short transverse lines, and one long line embossed on each roller, so that the impressions will be divided into groups of ten, each group designated by one long line. The knobs of the plungers are provided with any suitable distinctive marks to prevent the knob which is struck to record a full fare being mistaken for the other, or vice versa.

The sides of the apparatus or box are hinged or otherwise secured, so that access may readily be obtained to the interior by the proper officer of the company, but not by the conductor, to whom the interior is to be inaccessible.

What I claim as my invention is—

1. The combination, in a fare-registering device, of an imprinting-roller, *c*, presser-roller *d*, and plunger D, the said several parts being constructed and operated substantially as described, and arranged to record each fare received upon a continuous strip of paper, F, as set forth.

2. In a fare-registering apparatus provided with an imprinting-roller, *c*, and a bell, H, the plunger D, having a projection, *f*, formed on one side, and a pawl, *a*, pivoted thereto on the opposite side thereof, and arranged substantially as set forth, to strike the bell, and record the fare by one and the same stroke of the said plunger.

ALBERT F. JOHNSON.

Witnesses:

JOHN S. THORNTON,
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