T. W. Gibbons.

Fare Box.

No. 24,295. Patented Jun. 7, 1859.

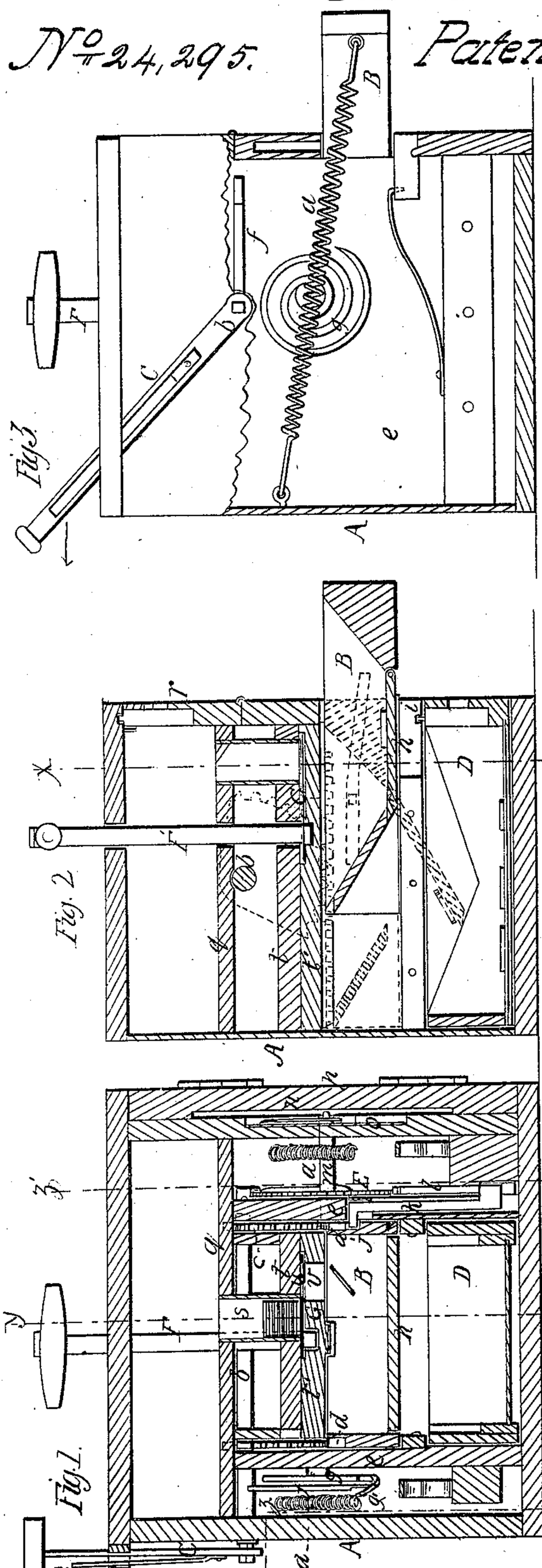

Fig. 3.

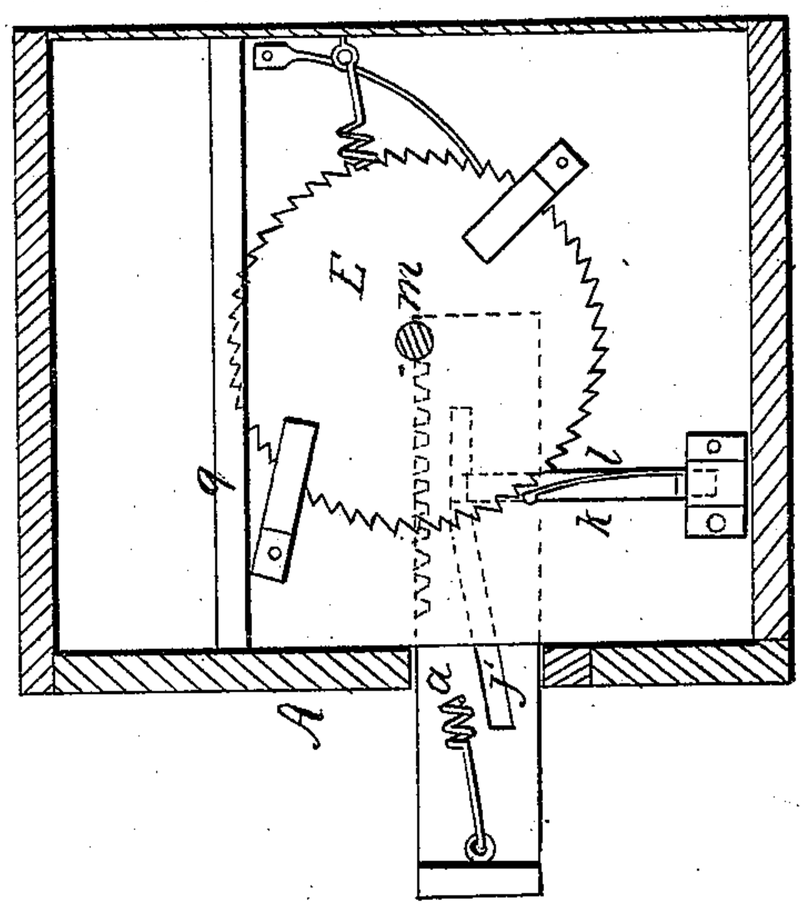

Fig. 4.

Fig. 2.

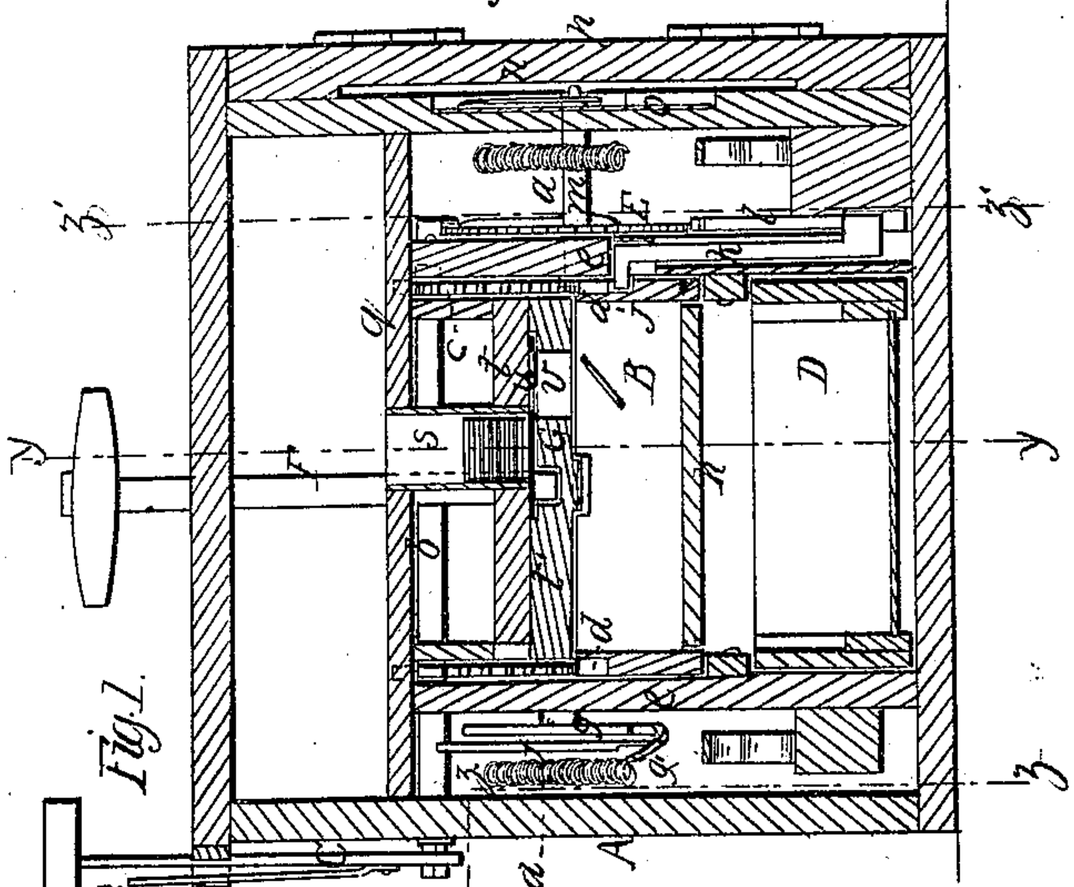

Fig. 1.

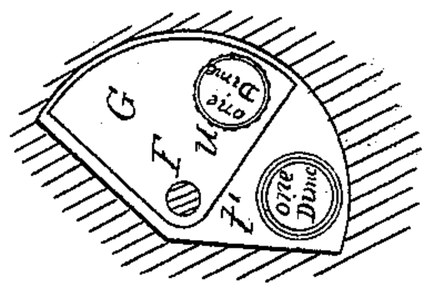

Fig. 5.

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UNITED STATES PATENT OFFICE.

T. W. GIBBONS, OF FRANKLIN, NEW JERSEY.

MONEY-BOX FOR STAGES, &c.

Specification of Letters Patent No. 24,295, dated June 7, 1859.

To all whom it may concern:

Be it known that I, T. W. GIBBONS, of Franklin, in the county of Hunterdon and State of New Jersey, have invented a new and Improved Money-Box or Till for Omnibuses, Stages, and Similar Public Conveyances; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a vertical section of my invention taken in the line *x*, *x*, Fig. 2. Fig. 2, a vertical section of the same taken in the line *y*, *y*, Fig. 1. Fig. 3, a vertical section of the same taken in the line *z*, *z*, Fig. 1. Fig. 4, a vertical section of the same taken in the line *z'*, *z'*, Fig. 1. Fig. 5, a detached plan or top view of a change slide or plate.

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

This invention is designed to protect the interests of proprietors of omnibuses, stages and other public conveyances in which the fares are paid to the drivers, the invention preventing the pilfering of the latter by obviating the necessity of paying the fares to them.

The invention consists in having a drawer or till placed within a box and arranged with a lever, change slides or plates, supplemental drawers, an alarm or signal and an index and dial, as hereinafter fully shown and described, whereby passengers may deposit their fares in a drawer and take the necessary change therefrom in view of the driver without the latter having any control over the money, which is safely secured and locked within the box and taken therefrom by the proprietor or his agent at the end of the route.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a rectangular box of any suitable dimensions which is secured within an omnibus or stage just below and back of the driver's seat so that the driver may by looking through a glass have a full view of the box. This box A contains a drawer B, to each end of which a spiral spring *a*, is attached said springs having a tendency to keep the drawer B, closed or within the box A.

Within the box A, a shaft *b*, passes horizontally, said shaft having two toothed sectors *c*, *c*, placed thereon, which sectors gear into racks *d*, *d*, attached to the upper edges of the sides of drawer B, see Fig. 1, and dotted lines in Fig. 2. One end of the shaft *b*, passes through a side of box A, and a lever C, is attached thereto, said lever passing through the top or side of the omnibus or stage and by the seat of the driver so as to be within the reach of the latter. The drawer B, is fitted and allowed to slide between vertical partition plates *e*, *e*, in the box A. To the shaft *b*, an arm *f*, is attached, said arm being at the outer side of the compartment formed by the partition plates *e*, *e*. To the adjoining partition plate *e*, a coiled steel wire *g*, is attached to form a bell, the end of said coil being curved outward as shown at *g'*, to intersect the plane of the movement of the arm *f*, as shown clearly in Fig. 1.

Below the drawer B, in the box A, and between the same partition plates *e*, *e*, a drawer D, is placed. This drawer is provided with a lock and key and its contents are not accessible to either the driver or the passengers. The bottom of the drawer B, is provided with a flap or trap door *h*, which, when the drawer B, is open, is kept closed by the front rail *i*, on which the drawer B, slides, the flap or door *h*, being allowed to drop when the drawer B, is closed, as shown in red Fig. 2.

In one side of the drawer B, an inclined slot *j*, is made, and in this slot the upper end of a slide *k*, is fitted. To this slide *k*, a pawl *l*, is attached, which pawl when raised engages with and actuates a ratchet E, which is placed on a shaft *m*, at the side of the box A, opposite to that where the bell *g*, is placed. The shaft *m*, has an index *n*, on its outer end, said index traversing over a dial plate *o*, placed in the side of the box A, and inclosed by a door *p*, which may be locked, the key being kept by the same person who keeps the key of drawer D.

Within the box A, directly above the shaft *b*, a horizontal partition plate *q*, is placed, and *r*, is a flap door which incloses the compartment formed by said partition plate. This flap door is also provided with a lock and key, the latter being kept by the person who keeps the keys of the drawer D, and door *p*.

In the partition plate *q*, a vertical tube *s*, is fitted. The upper end of this tube is flush with the plate *q*, and its lower end pro-

jects down through a plate or board t, which is directly over a board t', that is above the drawer B.

F, is a vertical shaft which passes through the top of the case A, through the partition plate q, and is stepped at its lower end in the plate or board t'. To the lower end of shaft F, a sector or quadrant-shaped plate G, is attached, said plate being between the two boards t, t', as shown plainly in Figs. 1, and 2. The plate G, has a hole a, made through it corresponding in diameter to that of the tube s, and a corresponding hole v, is made in the board t', the hole v, being out of line with the tube s, as shown clearly in Fig. 1, but the hole u, of plate G, by turning shaft F, may be made to register either with tube s, or the hole v.

The operation is as follows:—When a passenger approaches the box A, to pay his fare the driver from his seat at the outer side of the vehicle throws forward the lever C, in the direction indicated by the arrow Fig. 3. This movement of the lever C, throws open the drawer B, in consequence of the sectors c, c, on shaft b, gearing into the racks d, d. The door h, of drawer B, closes as the drawer opens and the passenger, observed by the driver through the glass deposits his fare in the drawer, which is then allowed to close in consequence of the driver relaxing his hold on the lever C, the springs a, a, closing the drawer. As the drawer B is opened the bell g, is sounded in consequence of the arm f, acting on the curved end g' of the coil. This serves as a signal to direct the attention of the passengers to the box and also to enable a spy to count the number of fares that have been deposited in the drawer. Each time the drawer B, is thrown open the slide k, is actuated by the inclined slot j, and the pawl l, turns the ratchet E, one notch and the index n, one degree on the dial o. The index therefore points out on the dial the number of fares that have been paid. In case a plurality of passengers deposit their faces in the drawer B, simultaneously, it is demanded of the driver to throw out the drawer B, a corresponding number of times, so that the index n, and the amount of money in drawer B, will always coincide. Hence the object of the bell which directs the attention of passengers to the payment of the fares and prevents a driver having an accomplice within the vehicle to adroitly abstract money, in case several passengers pay or deposit their fares simultaneously. Each time the drawer B, closes, the flap or door h, drops and the money in the box B descends into the drawer D, which is locked and opened only by the proprietor or his agent at the end of the route. In case a passenger has not the precise change, he takes it from the box A, as follows: The proprietor previous to the commencement of the running of the vehicle fills the tube s, with dimes, only one tube s, is represented, but in practice several will be used, one for dimes, another for half dimes, etc. Suppose for instance, the fare is 5 cents, or a half dime, and the passenger deposits a 25 cent piece in the drawer B, 20 cents or two dimes change is required. This is obtained by the driver turning the shaft F, so that the hole u, in plate G, will register with the tube s, and receive a dime, the plate G, being just thick enough for such purpose. The shaft F, is then turned so that the dime will be brought over the hole v, in the board t', and the dime will drop into the drawer B. This operation is repeated and the two dimes are taken by the passenger the proceedings being watched by the driver, who is compelled to do it in order that the aggregate fares may be made to tally correctly with the registered number of movements of the drawer.

This invention is quite simple and may be applied to omnibuses and stages at a very moderate cost. Its adoption will fully protect the interest of the proprietors of public conveyances of the class mentioned. It is estimated that the average losses incurred by dishonest employees is about 10 per cent. of the receipts.

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

1. The box A, provided with the drawers B, D, the former having a flap or door h, in its bottom and arranged to operate substantially as and for the purpose set forth.

2. The change slide or plate G, one or more, used in connection with tubes s, and arranged relatively with drawer B, to operate substantially as and for the purpose set forth.

3. In combination with the drawers B, D, and change plate or plates G, the bell g, and index n, and dial o, arranged substantially as and for the purpose set forth.

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