

J. BLUEMEL.
Fare-Register.

No. 203,881.

Patented May 21, 1878.

Fig. 1.

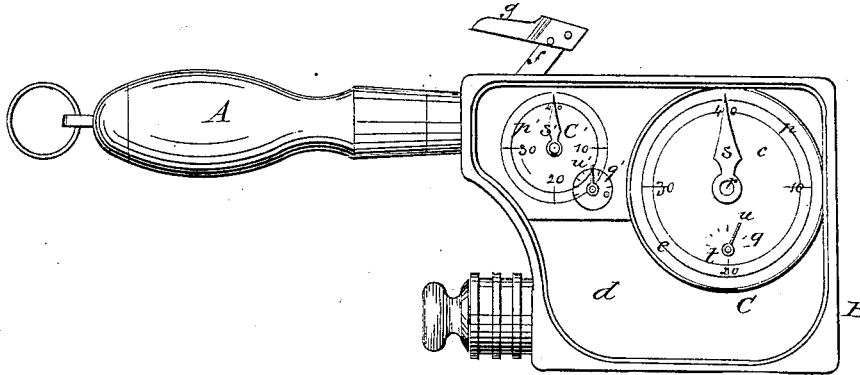


Fig. 2.

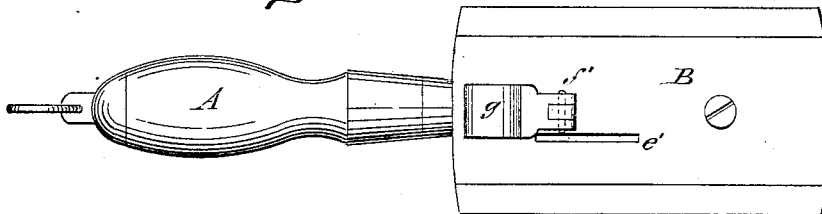


Fig. 3.

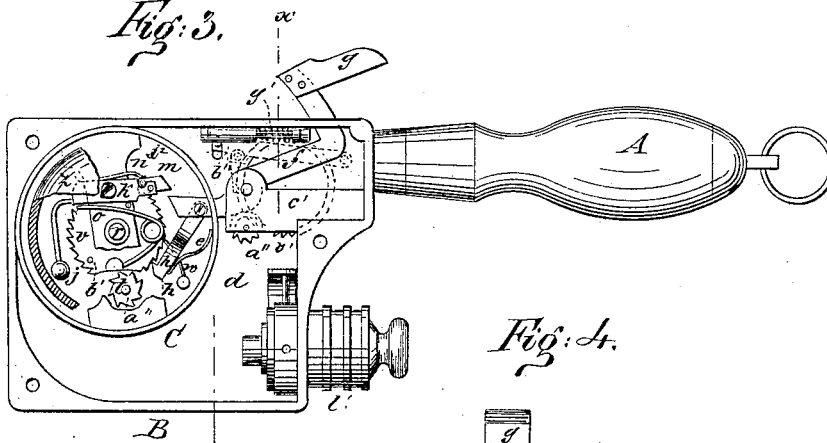
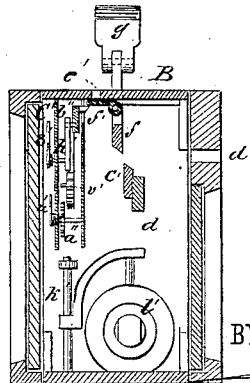


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JULIUS BLUEMEL, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN FARE-REGISTERS.

Specification forming part of Letters Patent No. 203,881, dated May 21, 1878; application filed January 8, 1878.

To all whom it may concern:

Be it known that I, JULIUS BLUEMEL, of San Francisco, county of San Francisco, State of California, have invented a new and Improved Fare-Register, of which the following is a specification:

Figure 1 is a side elevation of my improved fare-register. Fig. 2 is a plan view. Fig. 3 is a side elevation, partly in section. Fig. 4 is a transverse section taken on line *x x*, Fig. 3.

Similar letters of reference indicate corresponding parts.

My invention relates to a device for registering cash fares and clipping and registering tickets; and it consists in a case having glass sides and containing a clipping device, a bell which rings when the clipping device is operated, a registering device for recording each ticket clipped, and also a device for registering the cash fares.

Referring to the drawing, A is a handle, to which is attached a frame, B, which contains glass panels, between which the working parts of the device are placed. The space thus inclosed is divided by the curved partition *c* into compartments *d d'*. In one compartment, *d*, is pivoted a lever, *f*, one end of which is bent upward, extending through the top of the frame B, and is provided with a thumb-piece, *g*. The other end projects through a slot in the curved partition *c*, and to it a hooked pawl, *h*, is pivoted. In the other compartment, *d'*, there is a bell, *z*, which is struck by the hammer *j*, that is secured to the lever *k*, which turns on the pivot *l*.

To one of the arms of the lever *k* a dog, *m*, is pivoted, which is kept in its normal position by a spring, *n*. When the lever *f* is moved the dog *m* is engaged, and the hammer *j* is drawn back until the dog escapes the end of the lever, when the spring *o* propels the hammer so as to strike the bell.

A dial, *e*, is placed in the compartment *d* opposite the bell, and has two sets of graduations, *p q*. The graduations *p* are located at the edge of the dial, and concentric with the arbor *r*, that carries the index *s*. The graduations *q* are multiples of the total number of graduations on the edge of the dial. The circle on which the graduations *q* are made is concentric with the arbor *t*, that car-

ries the index *u*. Upon the arbor *r*, at the back of the dial, a ratchet-wheel, *v*, is secured in position to be engaged by the pawl *h*. The ratchet is prevented from retrograde movement by a spring-pawl, *w*. The arbor *t* is provided with a star-wheel, *a''*, that is engaged by a pin, *b'*, that projects from the face of the ratchet *v*, so that at every revolution of the ratchet the star-wheel is moved one notch, recording the total of fares indicated by a single revolution of the index *s*.

The edge of the outer portion of the lever *f* is sharpened in the same manner as shear-blades are sharpened, and it moves along a stationary blade, *c'*, as the register is operated.

A slit, *d'*, is made in the side of the register-casing to receive the end of the ticket which is clipped by the cutting-edge of the lever *f*. The portion that is clipped from the ticket falls into the compartment *d*, where it may be seen by the passengers or conductor.

There is a slit, *e'*, in the top of the frame B, that communicates with the compartment, and is closed by a hinged plate, *f'*, that is pressed upward against the inner surface of the frame B by a spring, *g'*.

At the side of the casing a dial, *C'*, for registering cash fares, is secured, which is provided with graduations *p' q'*, indexes *s' u'*, and with a ratchet-wheel, *v'*, and star-wheel *a''*, and is, in all respects, arranged like the dial *e* and its registering mechanism. The ratchet-wheel *v'* is engaged by a spring-pawl, *h'*, pivoted to the lever *b''*, which is moved by the hinged plate *f'*, so that whenever the plate is moved by inserting a coin in the slit *e'*, the ratchet-wheel *v'* will be moved forward one notch.

It will be observed that the hinged plate prevents the extraction of coin or ticket-clippings from the compartment, and that any attempt at opening the slit *e'* by forcing the hinged plate *f'* inward will result in operating the registering mechanism.

One of the sides of the casing B is hinged for the removal of ticket-clippings and coin, and is provided with a hasp or staple for receiving a bolt, *k'*, which is prevented from sliding when the door is closed by a combination-lock, *l'*.

The construction of the register is such that it cannot be tampered with without detection.

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

1. The combination, with the frame B, having handle A, glass panels, partition C, and compartments *d d'*, of the clipping, striking, and registering devices, substantially as shown and described.

2. The combination of lever *f*, having thumb-piece *g* and pivoted hook-pawl *h*, the striking

device *z j*, and the spring-lever *k*, as and for the purpose set forth.

3. The combination, in a fare-register, of the lever *k*, carrying the dog *m* and hammer *j*, the bell *z*, and the lever *f*, having a shear-cutting edge, substantially as herein shown and described.

JULIUS BLUEMEL.

Witnesses:

H. ARGENS,
A. MORATH.