

(No Model.)

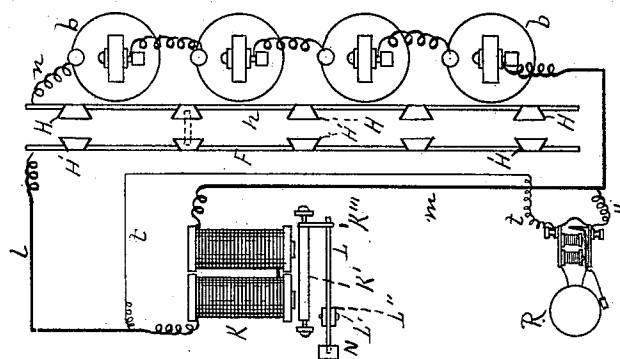
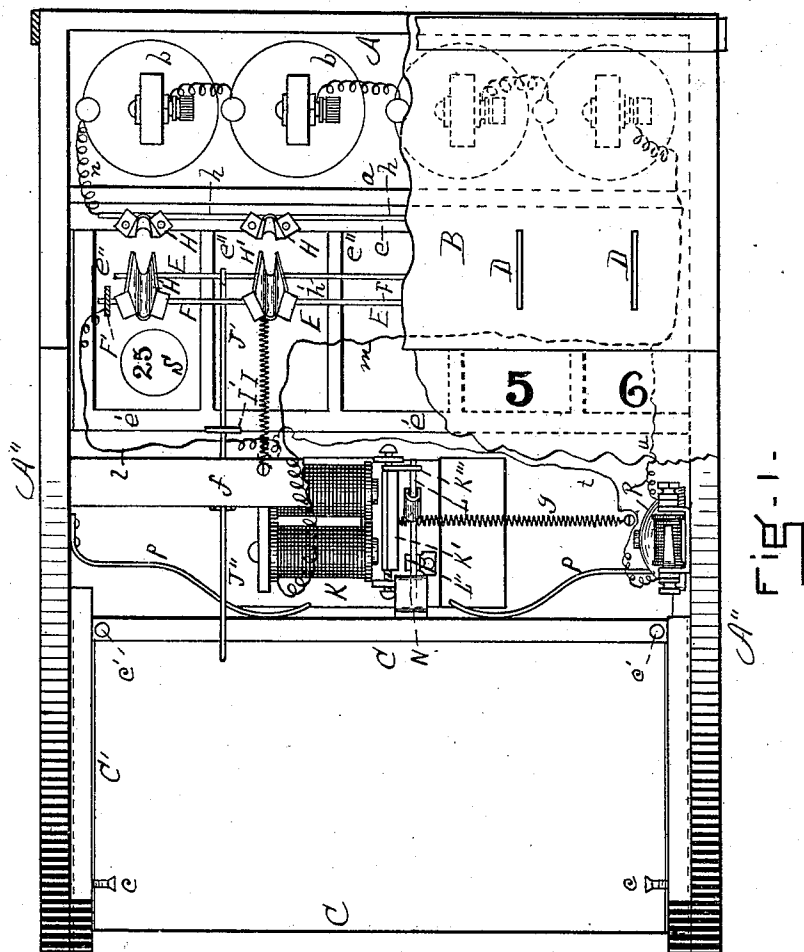
2 Sheets—Sheet 1.

A. R. MIRANDA.

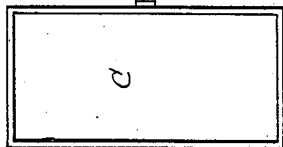
COMBINED CHECK RECEPTACLE AND CASH DRAWER.

No. 577,533.

Patented Feb. 23, 1897.



WITNESSES
A. N. Pomeroy.
C. G. Graydon.



INVENTOR
Abraham R. Miranda
By His Atty.
Henry Williams

(No Model.)

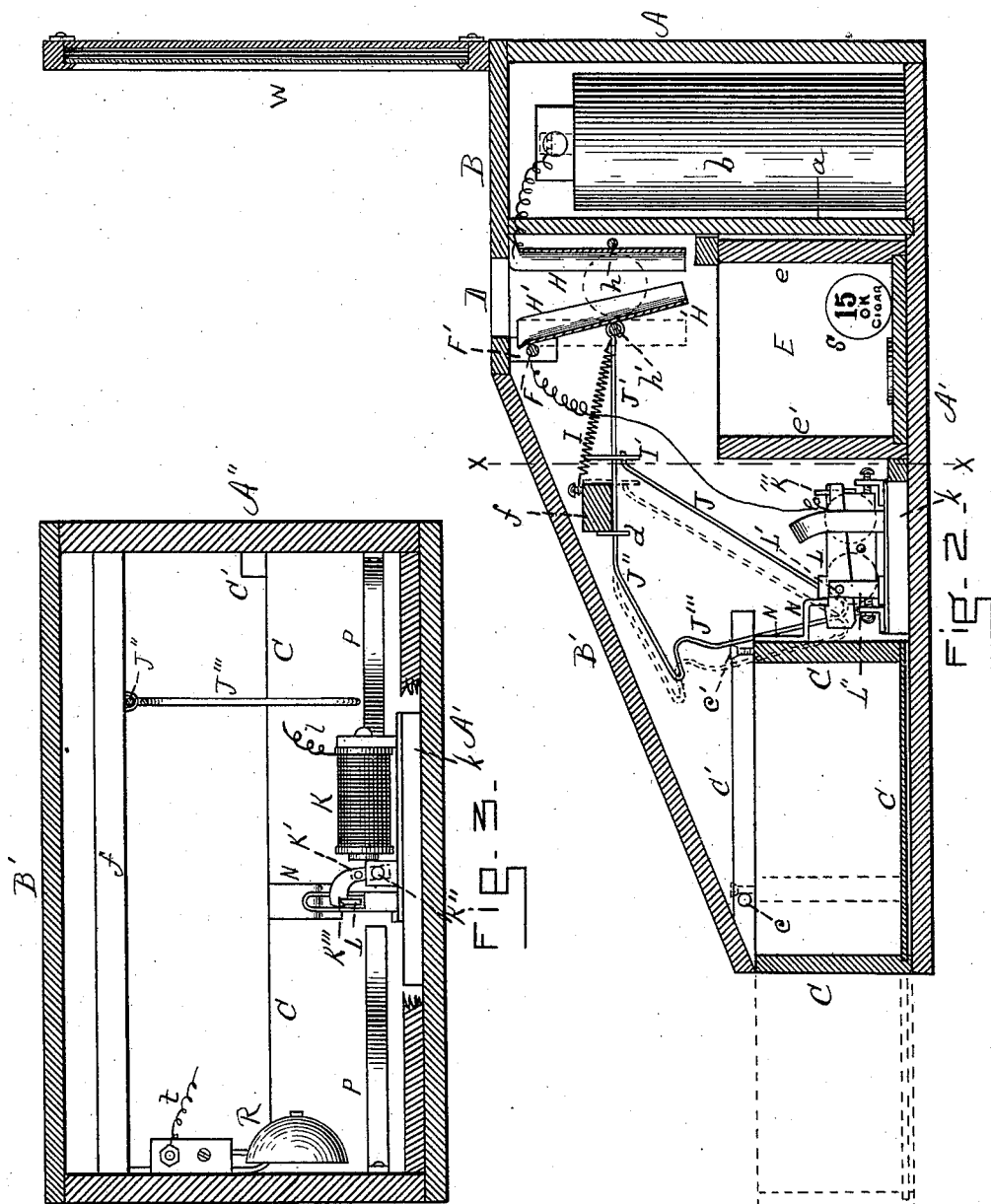
2 Sheets—Sheet 2

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UNITED STATES PATENT OFFICE.

ABRAHAM R. MIRANDA, OF BOSTON, MASSACHUSETTS.

COMBINED CHECK-RECEPTACLE AND CASH-DRAWER.

SPECIFICATION forming part of Letters Patent No. 577,533, dated February 23, 1897.

Application filed November 27, 1896. Serial No. 613,500. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM R. MIRANDA, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in a Combined Check-Receptacle and Cash-Drawer, of which the following is a specification.

This invention is a combined check-receptacle and cash-drawer intended for use in hair-dressing establishments. The apparatus is provided with a number of slots, each located over a separate compartment, said slots and compartments corresponding with the barbers' chairs in the establishment. When a particular barber or hair-dresser hands the check to his customer, the customer hands it to the cashier, who deposits it in the slot numbered to correspond with the chair just vacated. The check drops through the slot into the corresponding compartment beneath and while dropping completes an electrical circuit, with the effect of sounding an alarm and throwing open the cash-drawer, so that the money may be deposited and the proper amount of change returned to the customer. After this operation the drawer is closed and is automatically locked and the electromagnet and other parts returned to their original positions. The only method of opening or obtaining access to the drawer is by dropping a check through a slot into a compartment, as above mentioned. Provision is also made for the exhibition of advertising matter.

The nature of the invention is fully described in detail below and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the apparatus with the greater portion of the cover broken out. Fig. 2 is a substantially central longitudinal vertical section of the same. Fig. 3 is a cross vertical section on line X, Fig. 2, looking toward the front of the apparatus. Fig. 4 is a diagram showing the electrical connections.

Similar letters of reference indicate corresponding parts.

A, A', and A'' represent, respectively, the back, bottom, and sides of a case. B and B' represent, respectively, the horizontal and sloping portions of the top. A drawer C

slides in ways C', the front end of said drawer when closed filling the entire front end of the case. Suitable stops *c*, extending from the ways C', prevent the drawer from being drawn entirely out by engaging with the screws or pins *c'*, extending up from the rear wall of the drawer. A vertical partition *a* provides a chamber between it and the wall A, where- in are located batteries *b*.

The level portion B of the top is provided with a row of slots D, corresponding in number with the number of chairs in the establishment. In the apparatus shown in the drawings five such slots are formed. Beneath these slots are five compartments E, constructed by means of the rear wall *e*, front wall *e'*, and partition-walls *e''*. These compartments are all open at the top and one is located beneath each slot. Directly over each compartment is a pair of guide-troughs, each pair consisting of a trough H, which is substantially vertical and secured at its upper end rigidly to the under side of the top B, and a trough H', which is secured near its upper end to a horizontal rod F, having bearings in the hangers or brackets F', secured to the under side of the top B.

A rod *h* connects and is rigidly secured to the row of rigid troughs H', and a rod *h'* connects and is rigidly secured to the row of swinging troughs H'. These rods are applied to the closed or outer sides of the troughs, the inner or grooved sides facing each other.

A frame J is bent into substantially the shape shown and has its rearward extension J' swiveled upon the rod *h'*. The portion J'' of this frame extends through a guide-eye *d*, secured to the cross-bar *f*, which is supported by the side walls A'', and the forward portion J''' of the frame J lies against the rear edge of the drawer C when closed. The frame is held against the drawer by means of the spiral spring I, whose opposite ends are secured to the rod *h'* and cross-bar *f*, said spring serving also to hold the troughs H' forward out of contact with the troughs H, as shown, while the frame J J'' J''' is made of suitable shape and size to hold the troughs H' swung back sufficiently to bring their lower ends near the lower ends of the troughs H. A stop I' is applied to the portion J'' of the frame J for a purpose below described.

An electromagnet K is placed in the bottom of the case. The armature K' of this magnet is pivotally secured at K'' to the base *h*, which supports the magnet, and its upper end is formed into a hook K''', which lies normally upon and in engagement with the rear end of a lever L, which is fulcrumed at L' to the standard L'', extending up from the base *h*. The armature is held normally in this position by the spiral spring *g*, Fig. 1, whose opposite ends are secured to said armature and to the floor A'. The forward portion of the upper edge of the lever L' is provided with a recess, into which a catch N, Figs. 1 and 2, secured to the rear side of the drawer C, extends. The wire *l* extends from the magnet to one end of the metallic rod F, while the wire *m* extends from the magnet to the batteries *b*, which are connected by the wire *n* with the metallic rod *h*.

When a metallic check, as S, is dropped through one of the slots D, it falls between a pair of troughs H H', and when it has dropped into the position indicated by broken lines in Fig. 2 it connects said metallic troughs electrically, the current passing through wire *l*, rod F, the metallic trough H', the check S, the metallic trough H, rod *h*, wire *n*, batteries *b*, and wire *m* back to the magnet. This electrical connection causes the magnet to draw the armature K' into contact therewith, overcoming the power of the spring *g*. This movement of the armature withdraws the hook portion K''' from its engagement with the rear end of the lever L, thus causing the catch N to force down the front end of said lever L and at the same time disengage itself from the notch therein, such forward movement of said catch being produced by the pressure of the frame J J'' J''' against the rear side of the drawer C, and also by springs P, which are secured at one end to the sides A'' and press with their free ends against the rear side of the drawer. As soon as this catch N disengages itself the drawer is thrown forward by said springs and the cash therein is rendered accessible, and the spring *g* draws forward the rod *h*, and hence the troughs H', as indicated by broken lines in Fig. 2, and the check drops into the compartment E, which is directly beneath the troughs through which it passed. During the above process an electrical alarm R is sounded, said alarm being connected with the wires *l* and *m* by the wires *t* and *u*. The position of the parts when the drawer has been thrown open is indicated by broken lines in Fig. 2, the stop I preventing any further forward movement of the troughs and parts between the troughs and the drawer, and the stops *c c'* preventing the drawer from being pushed entirely out. As soon as the change is made the drawer is pushed back and the catch N again engages the lever L, whose rear end is engaged by the hook K''', extending from the armature K'. The apparatus is then rendered inaccessible except by the dropping of a suitably-sized metallic check

into one of the slots D, when the above-described operation is repeated.

As each slot communicates with its own compartment E and corresponds with a particular chair, the amount of business done by each hair-dresser is easily ascertained.

I prefer to mount an advertising board or frame W, Fig. 2, in the position shown.

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

1. In an apparatus of the character described, the case provided with the slots D, a pair of metallic troughs H, H' set with their grooved portions facing inward or toward each other and hung beneath said slot, one of said troughs being adapted to swing toward and from the other; a check-receptacle located within the case beneath said pair of troughs; mechanism for holding the lower end of the swinging trough sufficiently near the other trough to cause a metallic check to come in contact with both troughs simultaneously after it has dropped through the slot; an electromagnet and electrical connections placing said troughs in circuit therewith and with electric batteries; a cash-drawer; and mechanism intermediate of the armature of the magnet, the cash-drawer and the troughs whereby the drawer is thrown open and the swinging trough swung away from the opposite trough, thus allowing the check to drop into its compartment, substantially as described.

2. In an apparatus of the character described, the case; an electromagnet provided with the swinging armature K' formed with the hook-shaped extension K'''; the lever L supported by a standard and with its rear portion engaged normally by said hook-shaped extension; the sliding cash-drawer provided on its rear side with a catch engaging normally with the forward end of said lever; springs secured to the case and pressing against the rear portion of the drawer; a pair of metallic troughs H, H' extending down into the case below a slot adapted to receive the metallic check, one of said troughs being arranged to swing toward and from the other; and an electrical connection embracing said troughs and magnet in a circuit which is completed when the check connects the troughs; and mechanism intermediate of the troughs and the drawer for impelling the latter forward when it is released by the armature of the magnet, substantially as set forth.

3. In an apparatus of the character described, a case provided with the slots D; a series of stationary metallic troughs H extending down into the case from said slots and connected together; a series of swinging metallic troughs H' connected together and hung within the case opposite to the stationary troughs, said series of troughs set with their grooves facing inward or toward each other; a spring I connecting the swinging troughs with the case and adapted to draw them forward; the frame J extending from

the swinging troughs, sliding in the case, and held normally by said spring against the rear side of the drawer; electrical connections adapted to complete the circuit by dropping a
5 metallic check between a pair of said troughs; an electromagnet; and mechanism intermediate of said magnet and the drawer for re-

leasing and impelling forward the same when such electrical circuit is completed, substantially as described.

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Witnesses:

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