

(No Model.)

H. KIEHL.
MANUAL CASH RECORDER.

No. 484,742.

Patented Oct. 18, 1892.

Fig. 1.

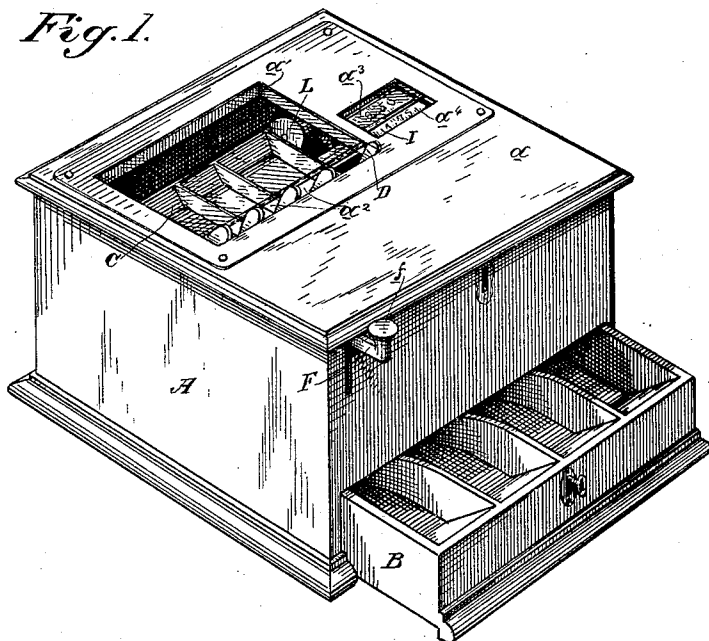
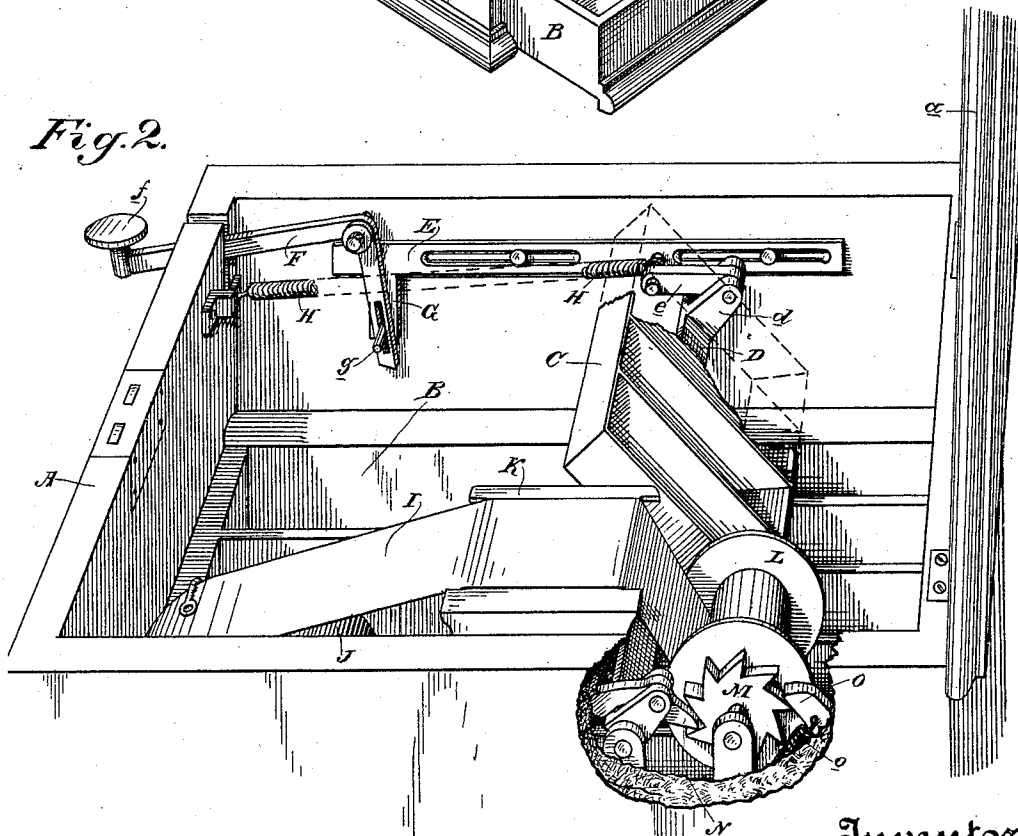


Fig. 2.



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UNITED STATES PATENT OFFICE.

HERMANN KIEHL, OF HALLE-ON-THE-SAALE, GERMANY, ASSIGNOR TO JESSE MEYERFELD, OF SAN FRANCISCO, CALIFORNIA.

MANUAL CASH-RECORDER.

SPECIFICATION forming part of Letters Patent No. 484,742, dated October 18, 1892.

Application filed June 30, 1892. Serial No. 438,586. (No model.) Patented in Germany January 18, 1887, No. 38,025.

To all whom it may concern:

Be it known that I, HERMANN KIEHL, a citizen of Germany, residing at Halle-on-the-Saale, Saxony, Germany, have invented an Improvement in Cash-Recorders, (for which I have received a patent in Germany, dated January 18, 1887, No. 38,025;) and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of cash-recorders in which a moving paper upon which the amounts received are to be written is employed as a check and confirmation of the amounts deposited in the receiver.

My invention consists in a box having within it a tilting tray adapted to receive the money and observable through a sight-aperture in the box and mechanism within the box operated by a handle or lever from without for tilting the tray.

My invention consists, also, in connection with the box, of a movable paper strip mounted therein and observable and its surface accessible from without, a tilting tray within the box observable through a sight-aperture therein, an opening in the box by which the money is passed to the tray, and suitable mechanism operated from a handle or lever on the outside of the box for simultaneously tilting the tray and advancing the paper.

My invention also consists in the novel details of construction, arrangement, and combination, which I shall hereinafter fully describe, and specifically point out in the claims.

The object of my invention is to provide a cash-recorder in which the coin or other money deposited in the receiver shall lie temporarily in full sight of the customer and in which a check or confirmation is provided by means of the traveling paper upon which the clerk is required to write the amount which he has deposited in the tray.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my cash-recorder. Fig. 2 is a view with the cover lifted, showing the parts in operation.

A is a casing or box. This box is provided with the hinged lid *a*, having a suitable lock for holding it in place and relieving it, whereby it may be opened. The bottom of the box

may be provided with the drawer B, with a suitable lock for keeping it closed and for relieving it to permit it to be drawn out to remove its contents, when required.

Mounted within the box near its upper back portion is a tray C. This tray is so mounted that it lies normally in a horizontal position, but may be tilted either partially or by a complete reversal to discharge its contents.

In the lid of the box directly above the tray is made a glass-covered sight-aperture *a'*, beside which is an entrance opening or slot *a''* for depositing the coin in the underlying tray. Now it will be seen that when the clerk receives the money he can deposit it in the tray by letting it drop through the entrance opening or slot *a''*, and while in this tray it is in full sight of the customer for as long as may be desired. Then by tilting the tray the money is discharged from it into the underlying drawer B.

Any suitable mechanism may be employed for tilting the tray. The mechanism I have here shown I deem both new and useful. It is as follows: The tray is supported upon a rock-shaft D, one end of which is provided with the crank *d*. Within the side of the box A is suitably mounted a slide-bar E. This bar is connected with the crank *d* of the rock-shaft by means of a link *e*. Pivoted within the top of the box near the front of one of its sides is a bell-crank lever F, the horizontal arm of which extends forwardly through a slot in the front of the box and is provided with a handle *f*. The vertical arm of this lever is slotted for the pin *g* of a downwardly-extending arm G of the slide-bar E. A spring H is attached to the front of the box and to the slide-bar and has the effect of holding said slide-bar forward and keeping the tray normally in a horizontal position. Now it will be seen that by depressing the handle *f* of the bell-crank lever F its vertical arm will be thrown backward and will thereby move the slide-bar E backwardly, which, through its connection with the rock-shaft D, will turn said shaft and thereby tilt the tray to discharge its contents. Upon relieving the handle *f* the parts, under the influence of the spring H, will return to nor-

mal position. Now to check and confirm the amounts deposited in the tray I have a moving slip of paper I. This at one portion travels directly under a sight-aperture a^3 in the top of the box, which is partially covered with glass, leaving an uncovered portion a^4 , through which the pencil of the clerk may be inserted to write the amount deposited upon the paper. This paper is caused to travel intermittently, its movement being simultaneous with the tilting movement of the tray. Suitable power connections may be arranged for effecting this movement of the paper. I have here shown and claim the following: The paper is in the shape of a long strip, mounted at one end upon a reel J, thence passing over a stationary frame or table K, directly under the sight-aperture a^3 in the lid of the box, and thence around a winding-drum L. This winding-drum is provided on one end with a ratchet M. To the end of the rock-shaft D heretofore mentioned and which carries the tray C, is pivoted an actuating-pawl N, engaging the ratchet M of the winding-drum. This pawl is a gravity one, adapted to engage the ratchet-teeth in one direction and to slip them in the other. The ratchet is controlled by a retaining-pawl O, actuated by a spring o . It will now be seen that simultaneously with the tilting of the tray the winding-drum will be rotated and the paper will be advanced.

The operation of the register is as follows: When the clerk receives the money, he deposits it in the tray, and thereupon writes down upon the paper the amount deposited. The customer can see both these operations. When the next money is received, before it is deposited the handle f is pushed down and the tray is tilted to discharge the money previously deposited. At the same time the paper moves forwardly, and, passing under the glass of the sight-aperture, the amount previously written thereon is thus carried out of the way. The second money is thereupon deposited, the record of it made on the paper, and the operation is repeated.

The tray may be divided, as here shown, into compartments for the purpose of receiving different values of money, and the drawer B in the bottom may be likewise divided into compartments for the same purpose.

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

1. A cash-recorder consisting of a box having a sight-aperture and an entrance slot or opening for the money, a tilting tray within the box under the sight-aperture and in communication with the entrance slot or opening, and a movable paper within the box accessible over a limited portion of its surface from without, whereby the amount of money depos-

ited in the tray may be written on the paper, said paper being connected with and advanced simultaneously with and by the movement of the tray, substantially as herein described.

2. A cash-recorder consisting of a box having a sight-aperture and an entrance slot or opening for the money, a tilting tray within the box under the sight-aperture and in communication with the entrance slot or opening, a movable paper within the box accessible over a limited portion of its surface from without, whereby the amount of money deposited in the tray may be written on the paper, and suitable mechanism for simultaneously tilting the tray and moving the paper, substantially as herein described.

3. A cash-recorder consisting of a box having a sight-aperture and an entrance slot or opening for the money, a tilting tray within the box under the sight-aperture and communicating with the entrance-slot, a periodically-advancing paper within the box observable and accessible from without over a limited portion of its surface, a lever or handle projecting from within the box to the outside, and power-transmitting connections from said lever or handle to simultaneously tilt the tray and advance the paper, substantially as herein described.

4. In a cash-recorder, the combination of the tilting tray therein and means for operating the same, consisting of the rock-shaft on which the tray is mounted, said rock-shaft having a crank, a spring-controlled slide connected with the crank and having the downwardly-extending arm, and a bell-crank lever having a vertical arm slotted on the slide-arm and having a horizontal arm extending through the front of the case, so that it may be actuated from the outside, substantially as herein described.

5. In a cash-recorder having a box provided with the sight-apertures and openings described, the combination of the tilting tray within the box, the traveling paper, and the means for simultaneously tilting the tray and advancing the paper, consisting of the rock-shaft on which the tray is mounted, the crank on one end of the rock-shaft, the spring-controlled slide-bar connected with the crank, and the bell-crank lever connected with the slide-bar and extending through the front of the box, the winding-drum of the paper having the ratchet, the actuating-pawl on the opposite end of the rock-shaft, and the retaining-pawl, substantially as herein described.

In witness whereof I have hereunto set my hand.

HERMANN KIEHL.

Witnesses:

CARL BORNGRAEBER,
ALBERT ANSHEL.