(No Model.)

H. LOEWENBACH & C. FISHER.

CASH AND SALES REGISTER.

No. 538,172. Patented Apr. 23, 1895.

Fig. 1.

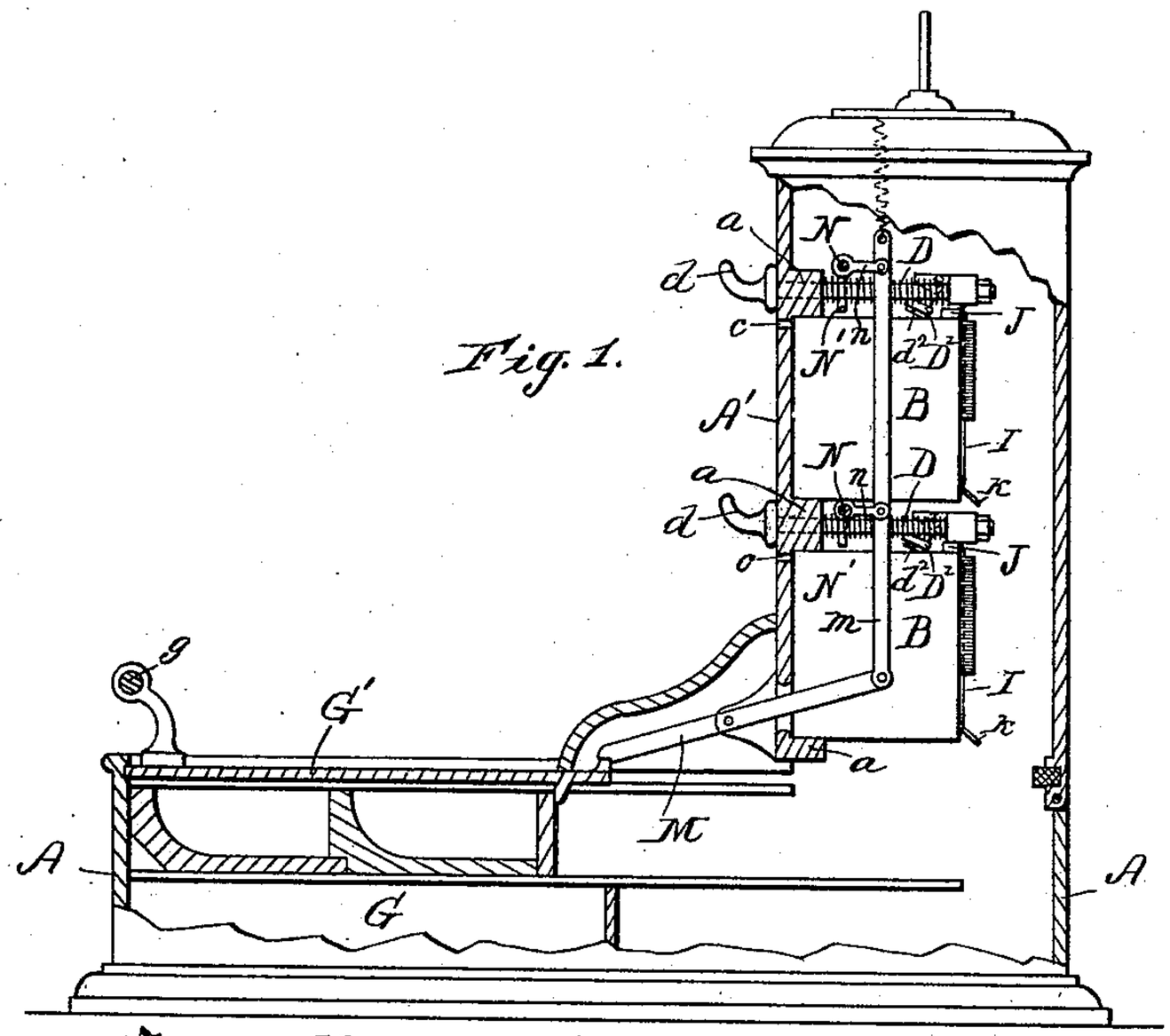


Fig. 2.

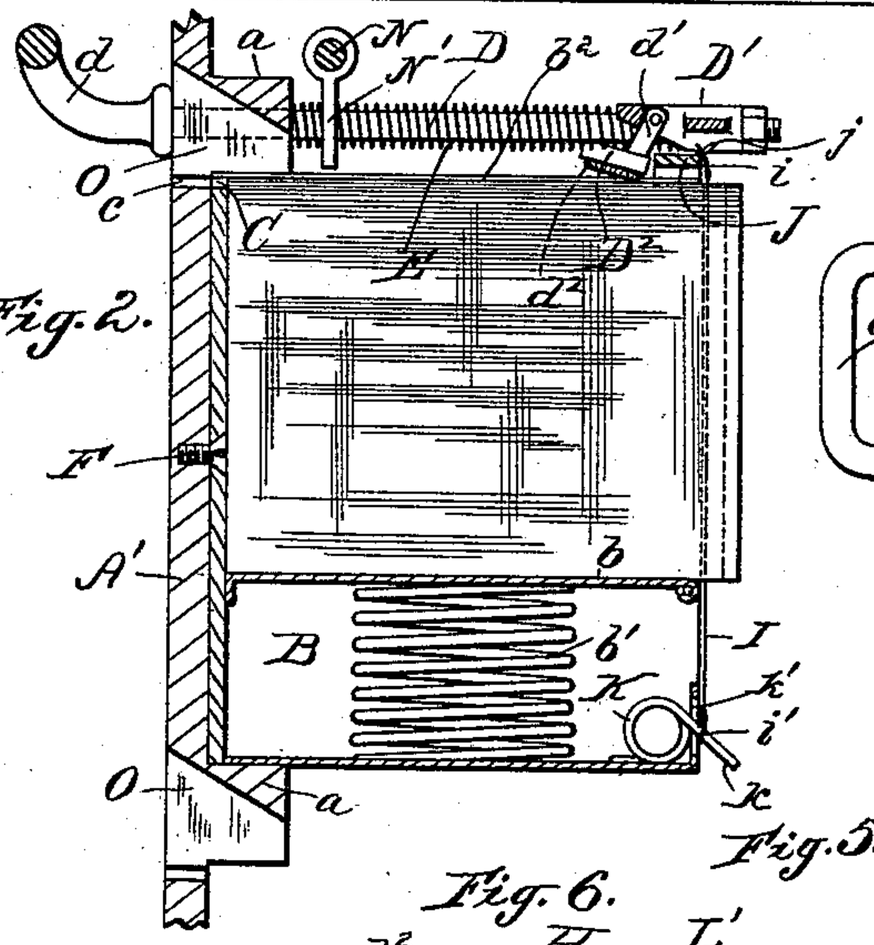


Fig. 3.

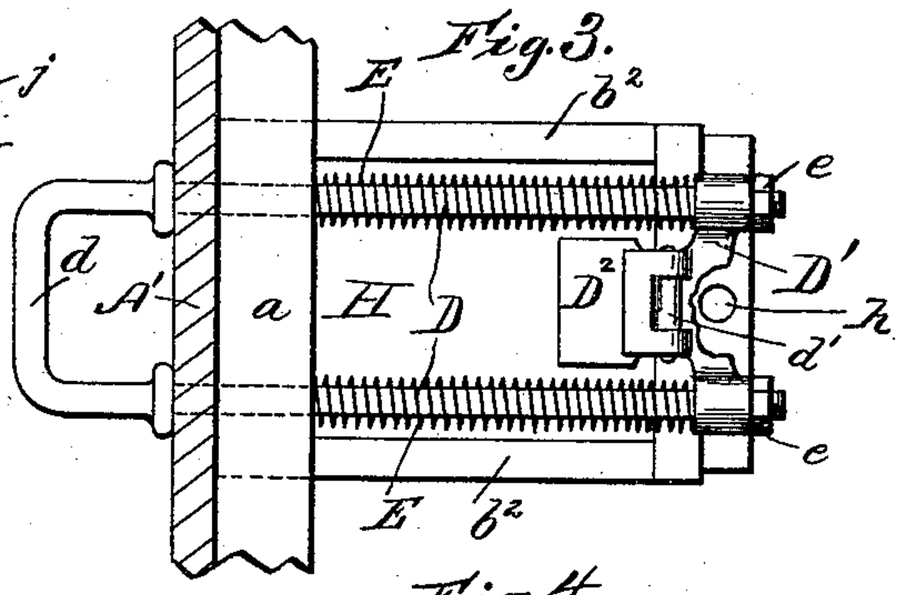


Fig. 4.

Fig. 5.

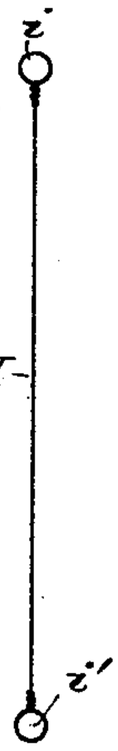
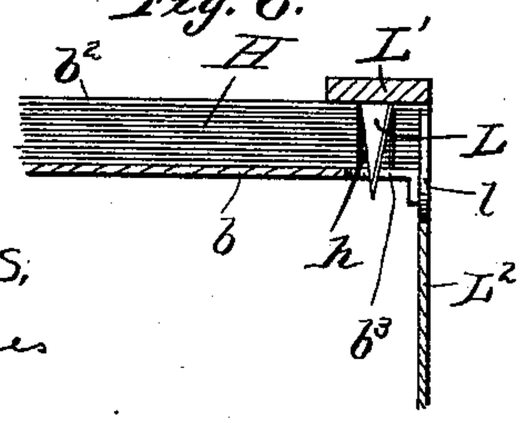
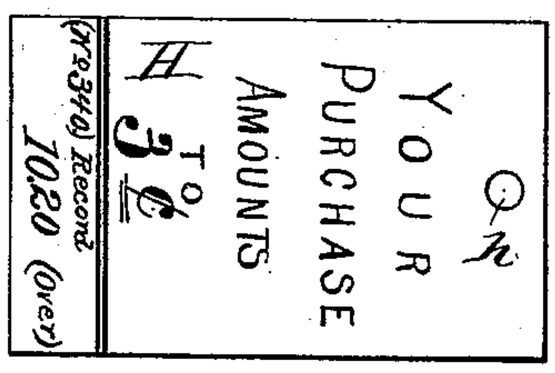


Fig. 6.





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UNITED STATES PATENT OFFICE.

HUGO LOEWENBACH AND CHARLES FISHER, OF MILWAUKEE, WISCONSIN, ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, TO THE GLOBE REGISTER COMPANY, OF SAME PLACE.

CASH AND SALES REGISTER.

SPECIFICATION forming part of Letters Patent No. 538,172, dated April 23, 1895.

Application filed October 19, 1893. Serial No. 488,581. (No model.)

To all whom it may concern:

Be it known that we, HUGO LOEWENBACH and CHARLES FISHER, citizens of the United States, residing at Milwaukee, county of Milwaukee, State of Wisconsin, have invented a certain new and useful Improvement in Cash and Sales Registers; and we declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to new and useful improvements in cash and sales registers, and consists in the matters hereinafter described and pointed out in the appended claims.

In the accompanying drawings illustrating our invention, Figure 1 is a view partly in side elevation and partly in section of a device constructed in accordance with our invention. Fig. 2 is an enlarged detail, vertical, sectional view illustrating the construction and arrangement of the receptacle for sales slips or tickets. Fig. 3 is a plan view of the same. Fig. 4 is a detail view of one of the sales slips or tickets. Fig. 5 is a separate detail view of one of the retaining wires which serve to hold the slips or tickets in position in the receptacles or compartments. Fig. 6 is a detail sectional view illustrating a somewhat different form of construction.

Our improved cash and sales register is constructed on the same general plan as that illustrated in our prior application for patent, filed August 18, 1893, Serial No. 483,490, being preferably provided with a plurality of compartments or receptacles, each adapted to hold a series of sales slips or tickets of a given denomination and provided with suitable devices for advancing the uppermost slips or tickets in said compartments or receptacles.

The object of our present invention is to provide suitable means whereby we are enabled to employ slips or tickets made of thin paper, and to insure the accurate feeding of the sales slips or tickets from their respective receptacles or compartments, one at a time.

A further object of our present invention is to provide suitable means for canceling the sales slips or tickets as they are fed from the receptacles or compartments.

Referring by letter to said drawings, A designates a suitable casing or housing, provided with a horizontally extending base in which are arranged any convenient form of receptacles for cash, and provided also with an upwardly extending portion in which are arranged the devices for holding and advancing the sales slips or tickets.

B B designate suitable boxes, each adapted for holding a number of sales slips or tickets, said boxes being conveniently secured to the front plate A′ of the casing, between suitable ribs *a a* upon the inner side of said front plate. A movable plate *b* is fitted within the box B, and arranged to support the series of slips or tickets, said movable plate being arranged to rest upon the upper end of a suitable spring *b′* resting upon the bottom of the box, which serves to constantly exert an upward pressure upon the series of slips or tickets.

The upper end of the box B is provided with marginal inwardly extending flanges b^2, against which the upper one of the series of slips or tickets is pressed, and in the front side of the box, immediately below the level of said flange, is provided a horizontal slot C, which is arranged to register with a similar slot *c* in the front plate A′ of the casing, so as to enable a suitable friction device to engage with the upper surface of the top one of the slips or tickets in the series, and push said slip or ticket forward through the slot C, and the slot *c*, so as to cause it to project beyond the front of the casing. For this purpose any form of friction device may be employed, but in practice we prefer to employ substantially the form of device illustrated in the drawings, in which two parallel rods D D are arranged to slide lengthwise in bearings formed in the ribs *a a*, said bars being connected with a suitable handle *d*, at their front ends and arranged to extend rearwardly inside of the casing above the tops of the boxes B B, one pair of said rods being preferably arranged above each box.

Upon the inner end of each pair of rods D D is mounted a suitable device for advancing the slips or tickets contained in the box,

and said device conveniently consists of a yoke piece D′ to which is pivoted a depending arm d' carrying at its lower end, a suitable shoe D^2 provided with a facing d^2 of rubber. This rubber faced shoe is arranged to rest by gravity upon the top of the uppermost slip or ticket in the box, in the manner shown in the drawings, when the friction device is in its normal or retracted position, and is arranged so as to bind against said uppermost slip or ticket so as to firmly engage therewith upon a forward pull upon the handle d, so as to advance said uppermost slip or ticket in substantially the same manner as is described in our aforesaid prior application for patent.

Suitable springs E E are arranged upon the rods D D and are arranged to bear at their front ends against the ribs a, and at their rear ends against the transverse yoke D′ in the manner shown so as to normally retract the friction device. The transverse yokes D′ D′ may be secured in any desired manner upon the inner ends of the rods D D, as for instance, in the manner shown in the drawings, in which the inner ends of said rods are screw-threaded for the reception of suitable retaining nuts e e which engage with the inner or rear sides of said yokes.

As a matter of convenience we prefer to secure the receptacles or compartments B B in position against the front of the housing or casing in substantially the manner shown in Fig. 2 in which a screw F is passed through the front wall of said receptacle or compartment and into the front wall A′ of the casing. In the lower part of the casing we arrange a money drawer or till G similar in construction to that shown in our said prior application, and provided with a sliding cover G′ having a suitable handle g.

As shown more particularly in Fig. 4, each of the sales slips or tickets H is provided adjacent to its rear end with a suitable aperture or perforation h for the reception of a suitable retaining and canceling device. This retaining and canceling device may be constructed in any desired or convenient manner, as for instance in the manner shown in Figs. 1, 2, and 5, in which a suitable wire I is provided at its upper and lower ends respectively with suitable loops or eyes i i'. Upon the top of the receptacle or compartment is arranged a suitable transverse bridge J preferably arched upwardly at the center and provided with a suitable pin or finger j for engagement with the loop or eye i upon the wire I. Within the lower part of the receptacle is conveniently provided a suitable coiled spring K which is provided with a rearwardly extending arm or end k which projects through a slot k' in the box or compartment and is adapted for engagement with the loop or eye i' at the lower end of the wire I. The arrangement of the spring is such that when in engagement with the loop at the lower end of the wire I, the loop at the upper end of said wire being in engagement with the pin or finger j, said spring will serve to stretch said wire taut in an obvious manner. With this form of construction, when the series of slips or tickets is placed within the receptacle or compartment with the apertures or perforations h in register, the wire I is passed upwardly through said apertures or perforations and engaged at its upper and lower ends respectively with the finger or pin j, and the free end k of the spring K, in the manner described. In this manner the entire series of slips or tickets is secured in place, and in order to remove any one or more of said slips or tickets it becomes necessary to tear the said slip or ticket off from said wire in an obvious manner.

In the particular form of construction shown in Fig. 6 of the drawings, a suitable depending knife blade L is secured to a transverse bridge L′ in such a manner as to extend downwardly part way through the passage formed by the perforations or apertures in the rear edges of the slips or tickets. In this latter form of construction when the friction device is operated to advance the uppermost slip or ticket in the receptacle or compartment, the said slip or ticket is cut or torn at its rear edge by a knife blade L in an obvious manner, the upper edge of the rear cover, L^2 being cut away as at l, for the escape of the waste paper.

It follows from the described constructions that with either form of said constructions but one ticket or slip can be advanced by the friction device by a single operation thereof, from the fact that in both of said forms of construction the slips or tickets are held in position, and only the slip or ticket which is engaged by the friction device can be removed. In other words, the strength of the paper at the rear sides of the perforations or apertures in the tickets is sufficient to retain the slips or tickets in their positions and to resist any tendency of one or more slips or tickets being advanced by reason of the frictional engagement of the uppermost slip or ticket therewith, and in order to tear or cut any one of said tickets so as to free it for advancement through the slot it is necessary for the friction device to be brought into direct engagement with said slip or ticket. By this construction we are enabled to employ slips or tickets made from thin paper which would be pierced by the pointed spring device shown in our former application, and if the retaining device were not used, more than one of the said tickets might be advanced at one time. A further advantage of this construction is that by reason of the employment of the retaining device which insures the accurate feeding of a single slip or ticket at each operation of the friction device, the slots in the front walls of the several

boxes or compartments for slips or tickets and in the front wall or plate of the casing need not be so accurately gaged as would be necessary in a construction similar to that shown in our said prior application in which the retaining device was omitted. As in our former application, the spring retracted sliding cover G′ of the till is normally held in its locked position by a pivoted lever M engaging with the rear edge of said cover and adapted for operation by means of a vertically movable bar *m* to free said cover.

In order to produce an operation of the vertical bar *m* to trip the pivoted lever M so as to free the cover G′ at each operation of a friction device to advance a slip or ticket, we provide suitable rock-shafts N N which are connected by arms *n n* with the bar *m* as in Fig. 1, and provided with depending crank arms N′ N′ arranged to extend into the paths of the several shoes D^2 D^2. By this construction it will be seen that when any one of the friction devices is operated to advance a sales slip or ticket, the corresponding one of the crank arms N′ will be engaged by the shoe and the rock-shaft N thereby actuated so as to depress the bar *m* and thereby operate the pivoted lever M to free the cover G′.

It will be understood that by the operation of any one of the friction devices the uppermost slip or ticket in the respective receptacle or compartment will be projected through the slot in the front wall of the casing sufficiently to enable it to be grasped and withdrawn from the compartment.

In practice we prefer to employ a series of sales slips or tickets of a given denomination which are arranged within the receptacle or compartment, as many denominations of said slips or tickets being employed as there are compartments or receptacles in the machine, and we further prefer to number the tickets of each denomination consecutively and to arrange said tickets within the respective receptacles in substantially the same manner as described in our aforesaid prior application.

Suitable apertures O O may if desired be provided in the front wall of the casing and so arranged as to expose the front edge of the uppermost slip or ticket in each compartment so that the serial numbers or multiples of the denominations of said tickets may be observed as well as the printed multiples of their denominations so as to enable the cashier to ascertain the exact amount of sales of any denomination by simply glancing at the edge of the uppermost slip or ticket of said denomination.

If desired, in order to produce an exceedingly cheap construction the friction devices might be dispensed with, and the uppermost slips or tickets simply withdrawn through the slots by inserting the finger in the apertures O O, in an obvious manner.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a cash and sales register the combination with a suitable casing, of one or more compartments each adapted to hold a series of sales slips or tickets, the casing being provided with horizontal slots in its front wall communicating with the upper portions of said compartments suitable retaining devices at the rear of said compartments adapted for engagement with perforations in the rear ends of the slips or tickets, rods or bars extending horizontally through bearings in the front wall of the casing, and provided with operating handles, and arranged in pairs above the several compartments, a yoke connecting the inner ends of each pair of rods or bars, and an arm pivoted to the central part of said yoke and arranged to depend into engagement with the uppermost slip or ticket in the compartment, and provided with a facing or shoe of rubber or analogous material, substantially as described.

2. In a cash and sales register the combination with a suitable casing and one or more compartments, each adapted to hold a series of sales slips or tickets, the casing being provided with horizontal slots communicating with the upper portions of said compartments, retaining devices adapted for engagement with the rear edges of said slips or tickets, horizontal rods extending above said compartments and through the front wall of the casing and provided with operating handles and friction devices secured to said rods and each comprising a pendulous arm and a shoe or cushion of yielding material secured thereto, said arm being arranged to normally rest obliquely, with its shoe in engagement with the uppermost slip or ticket, whereby a forward movement of the operating handle will serve to press said shoe into forcible engagement with said slip or ticket, substantially as described.

3. The combination with the receptacle for sales slips or tickets, means for yieldingly supporting a series of slips or tickets a friction device adapted for engagement with the face of said slips or tickets for advancing them one at a time, a retaining wire detachably secured to the upper and lower walls of the receptacle or compartment and arranged to extend vertically through perforations in the rear edges of the series of slips or tickets, and a tension device for normally holding said retaining wire taut substantially as described.

4. The combination with the receptacle for slips or tickets provided with a horizontal slot in its upper front wall for the extraction of the contained slips or tickets a movable spring supported plate for normally pressing the series of slips or tickets upwardly and a friction device adapted for engagement with the upper face of the uppermost slip or ticket in

the compartment of a hook at the upper rear portion of the receptacle, a tension spring at the lower rear portion of said receptacle, and a retaining wire adapted for detachable engagement with said hook and spring and arranged to extend vertically through perforations in the rear edges of said slips or tickets, substantially as described.

In testimony whereof we sign this specification in the presence of two witnesses.

HUGO LOEWENBACH.
CHARLES FISHER.

Witnesses:
JOHN E. WILES,
M. M. WILES.