

No. 615,020.

Patented Nov. 29, 1898.

J. A. HOFF.  
AUTOGRAPH CASH REGISTER.

(Application filed Feb. 14, 1898.)

(No Model.)

2 Sheets—Sheet 1.

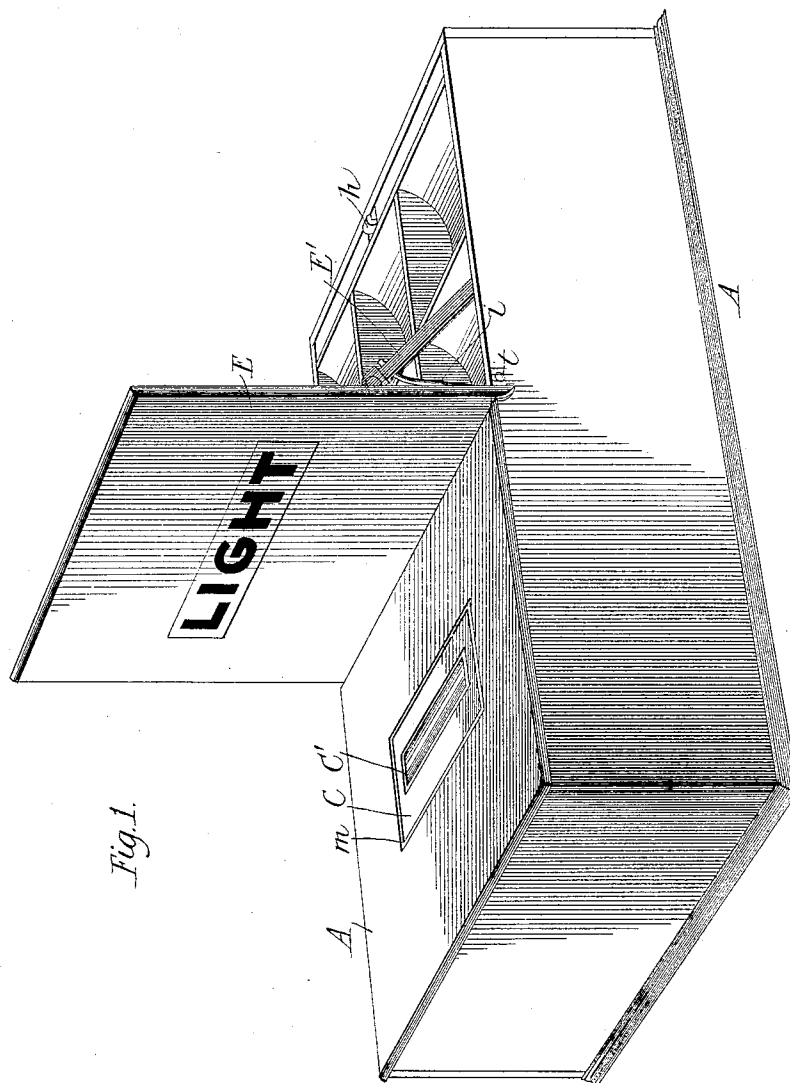


Fig. 1.

WITNESSES

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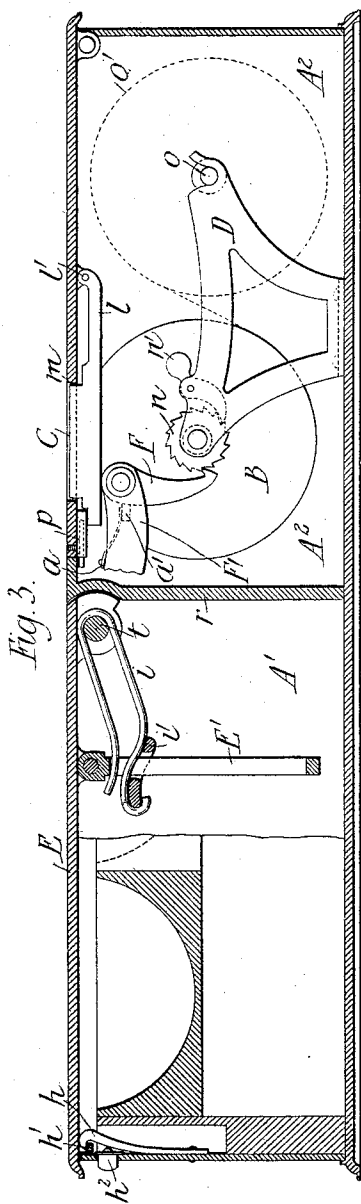


Fig. 3.

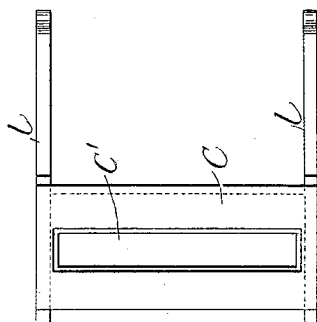


Fig. 4.

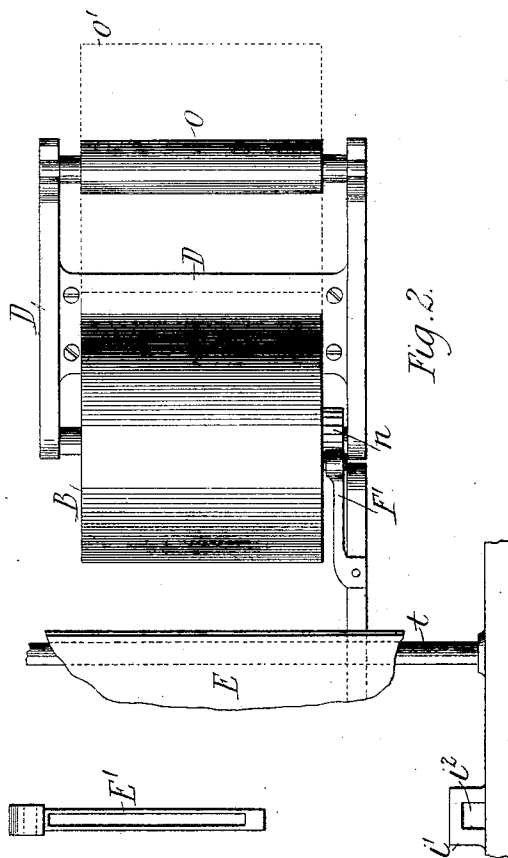


Fig. 5.

Fig. 2.

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# UNITED STATES PATENT OFFICE.

JOHN A. HOFF, OF CHICAGO, ILLINOIS, ASSIGNOR TO WILLIAM T. BLAINE,  
OF SAME PLACE.

## AUTOGRAPH CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 615,020, dated November 29, 1898.

Application filed February 14, 1898. Serial No. 670,289. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. HOFF, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have  
5 invented a new and useful Improvement in Autograph Cash-Registers, of which the following is a specification.

My invention relates to an improvement in the class of devices in common use among  
10 trades-people for registering the amounts and other items of their business transactions as they are made by writing them upon a suitable registering-strip housed in the casing of the device, which usually contains also a  
15 money-receptacle for the cash taken in from sales and from which to make change. In this class of autograph cash-registers the paper upon which to record the items is provided on a roll, from which it is fed to another record-roll, both rolls being supported in the  
20 case and accessible only to those having authority to open the case for withdrawing periodically from the record-carrying roll the register-strip wound thereon.

25 The primary object of my invention is to provide in the class referred to a very simple and comparatively inexpensive general construction of autograph cash-register of a high degree of efficiency in its purpose.

30 Another object is to adapt the record-roll to afford the bed for the paper while being written on, and to that end to maintain its surface, notwithstanding variation in the diameter by increase in the quantity of the paper  
35 wound upon it, always in the same close relation to the base of the opening through which to write upon it from without the case.

A further object is to utilize the hinged lid of the cash-receptacle, particularly where the  
40 latter is stationary, as it is by preference in its present connection, as the medium for automatically effecting the feeding of the paper from the supply-roll to the register-roll and the winding upon the latter of a proper extent  
45 of the paper after each record made thereon, thus to present thereafter a clean space for a fresh registration.

Referring to the accompanying drawings, Figure 1 is a perspective view of my improved  
50 autograph cash-register with the swinging cash-receptacle lid raised; Fig. 2, a view of

the same in longitudinal sectional elevation, partly broken, with the lid down; Fig. 3, a broken plan view of the same; Fig. 4, a plan view of the slotted follower-table containing  
55 the autograph-slot through which to write on the register-roll, and Fig. 5 a view in elevation of a slotted stop detail for the lid-actuating spring.

A is the case, preferably of the rectangular  
60 shape illustrated and formed of any suitable material. I divide the case by a transverse partition *r* into compartments A' and A<sup>2</sup>, the former extending forward from the rear portion of the case, being subdivided, as indicated,  
65 into receptacles for different kinds or denominations of money, and the latter being covered by a lid A<sup>3</sup>, shown to be hinged at *v* and provided with a lock (indicated at *p* in Fig. 2) to prevent unauthorized access to  
70 the interior of the compartment A<sup>2</sup>.

A frame D is contained in the compartment A<sup>2</sup> for supporting a roller *o*, upon which is carried the supply-roll of paper, (indicated at  
75 *o'*), and a roll B, carrying on one of its journal ends a ratchet *n*, engaged by a dog *n'* on the frame to prevent reverse turning of the roll. In the cover or lid A<sup>3</sup>, over the roll B, is an opening *m*, in which is supported a plate C,  
80 of brass or other suitable material, containing a slot C' to extend along the center of the exposed-surface section of the roll B, the plate being provided with arms *l l*, each hinged at  
85 one end to a lug *l'*, depending in proper position from the under side of the cover A<sup>3</sup>, and projecting at its opposite end beyond the rear edge of the plate C and adjacent edge of the opening *m*. The distance between the arms  
90 *l l* corresponds more or less accurately with the length of the roll B, the ends of which are thus between the arms, while the plate always rests upon it by gravity, however its diameter may vary with increase or decrease  
95 of the thickness of windings of paper upon it, as hereinafter described.

E is the cover or lid of the compartment A', hinged at *t* to adapt it to be raised and lowered and having pivotally hung from its under side, near one edge and adjacent to the hinge *t*, a slotted bar E'. A spring *i* is fastened at one end in the upper part of the slot  
100 in the bar E' and passes thence about the rod

of the hinge *t* and back to a lug *i'*, projecting inward in proper position from a side of the case and about which the spring is firmly hooked. The lug *i'* contains a vertical opening *i''*, through which the bar *E'* passes freely. Thus the spring *i* is tensioned by closing the lid *E*, which is held closed against the recoil force of the spring by a spring-latch *h*, engaging a catch *h'* on the cover and controlled by a push-button *h''*, extending against it through the rear wall of the case.

*F* is a dog depending pivotally to engage with the teeth of the ratchet *n* from the end of an arm *F'*, extending into the compartment *A*<sup>2</sup> through a slot (not shown) in the partition *r* from the bottom of the lid *E* near its hinged end. From the back of the dog there projects a stop *a'*, engaged by a spring *a*, extending from the arm *F'* and tending to maintain the free end of the dog in the plane of the ratchet under the backward and downward movement of the arm in raising the lid, as hereinafter described.

On the outer side of the lid *E* is provided matter of advertisement, (indicated by the word "Light" in Fig. 1.) This advertising matter may be changed at will to suit the requirement of the advertiser, and may to that end be arranged in any suitable way to enable it to be conveniently changed at will.

The device is operated as follows: Entries are made upon the paper on the roll *B* (which is passed to it from the roll of paper on the roller *o*) from time to time, as occasion requires, by writing upon it through the slot in the follower-plate *C*. After each entry it is required that the lid *E* be raised, an operation which permits access to the compartment *A* for the purposes of depositing therein money and making change. The rise of the lid is effected by pressing the button *p*<sup>2</sup>, which forces the latch *h* out of engagement with the catch *h'* to release the lid, whereupon the recoil of the spring *i* forces the lid up, preferably to a vertical position, as represented in Fig. 1, past which it is prevented from turning by impingement of the lower closed end of the bar *E'* against that portion of the spring *i* which it encounters in rising with the cover. The rise of the lid swings backward, away from the ratchet *n*, the arm *F'*; but the spring *a* by its pressure against the dog maintains it in the plane of the ratchet to engage it when the free end of the arm is raised by lowering the lid, the relative movement of the dog being such that it engages the ratchet shortly before the lid reaches its completely-closed position, whereby in bringing it to full closure the dog will turn the ratchet and thus turn the roll *B*, the extent of turning which is gaged by the throw of the dog to turn only so much of the perimeter of the roll past the slot *C'* as shall take from view the entry previously made thereon and present at the slot blank space on the roll for a fresh entry. As the roll *B* is turned in the manner described it feeds upon itself from the sup-

ply-roll a proportionate extent of paper, and obviously as the diameter of the roll *B* increases with the accumulation of paper upon it, as also when the entire accumulation carrying the matter of record is removed from the roll, the plate *C* will rest upon its surface, thus maintaining it always in the same close relation to the slot *C'* for convenience in writing upon it.

Each time the cover *E* flies up it displays conspicuously to the customer or other person who faces the register the advertising matter. This is a feature that may be used to advantage in connection with my improvement, as it enables the advertising to be done, in as much variety as may be desired, cheaply in a telling manner.

The details of construction of my improved autograph cash-register as shown and described may be variously modified without departure from my invention. Thus a weight might readily be substituted for the spring *i* to serve the same purpose, and if a spring be used it may be otherwise arranged than shown to perform its function and to enable the bar *E'* to be dispensed with. Also other means than those shown and described may be used for supporting and actuating the rolls in the compartment *A*<sup>2</sup>. Nor do I limit my invention to the stationary covered character of the money-compartment being used in conjunction with the roll-containing compartment, the particular roll-actuating means, or the means set forth for maintaining the register-roll always in close relation to the autograph-slot, as either may be used to advantage with a different construction of the other.

What I claim as new, and desire to secure by Letters Patent, is—

1. In an autograph cash-register, the combination with the money-compartment, of a hinged lid provided with means for securing it in closed position and carrying a pendent pivotal slotted bar, and a spring fastened at one end to said bar, and passing at its opposite end through the slot therein and fastened to the case, substantially as described.

2. In an autograph cash-register, the combination with the money-compartment, of a hinged lid provided with a catch and carrying a pendent pivotal slotted bar, a spring-latch in said compartment in position to engage said catch when the lid is closed and a push-button for engaging said latch, and a spring fastened at one end to said bar and passing at its opposite end through the slot therein and fastened to a lug on the case, substantially as described.

3. In an autograph cash-register, the combination with a paper-roll-containing compartment, of a slotted plate in the top of said compartment supported to move independently of said top and follow the variations in diameter of the register-roll and remain in close relation to the surface thereof, substantially as described.

4. In an autograph cash-register, the com-

5 combination with a paper-roll-containing compartment having a movable cover provided with means for locking it and containing an opening over the register-roll in said compartment, of a follower-plate attached to said cover to rest on said roll and containing a slot, substantially as and for the purpose set forth.

10 5. In an autograph cash-register, the combination of a compartment having an autograph-opening in its cover and containing a roller carrying the supply of paper and a register-roll connected therewith by said paper, and supported below said opening, a cash-compartment having a movable cover and operating means for said rollers connected with said cover to be actuated by movement thereof, substantially as described.

20 6. In an autograph cash-register, the combination of a compartment having an autograph-opening in its cover and containing a roller carrying the supply of paper and a register-roll connected therewith by said paper and supported below said opening, a cash-compartment having a hinged cover equipped with a spring set by closing it to recoil and raise the cover when released and operating means for said rollers connected with said cover to be actuated by movement thereof, substantially as described.

30 7. In an autograph cash-register, the combination of a compartment having an autograph-opening in its cover and containing a

roller carrying the supply of paper and a register-roll connected therewith by said paper and supported below said opening, a ratchet 35 on the journal of the register-roll, a cash-compartment having a hinged automatically-rising cover provided with means for securing it in closed position, and an arm extending from said hinged cover and carrying a dog to engage with said ratchet, substantially 40 as and for the purpose set forth.

8. In an autograph cash-register, the combination of a case containing a partition dividing it into a cash-compartment and a paper-compartment equipped, respectively, with an automatically-rising hinged lid, provided with means for securing it in closed position, and a movable lid provided with a lock and containing an opening, a frame in said paper-compartment having journaled upon it a roller carrying the supply of paper and a register-roll connected therewith by said paper and carrying a ratchet, a slotted follower at the opening in said lid and containing an autograph-slot, and an arm extending from the cash-compartment lid and carrying a dog to engage said ratchet, the whole being constructed and arranged to operate substantially as described.

JOHN A. HOFF.

In presence of—  
R. T. SPENCER,  
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