

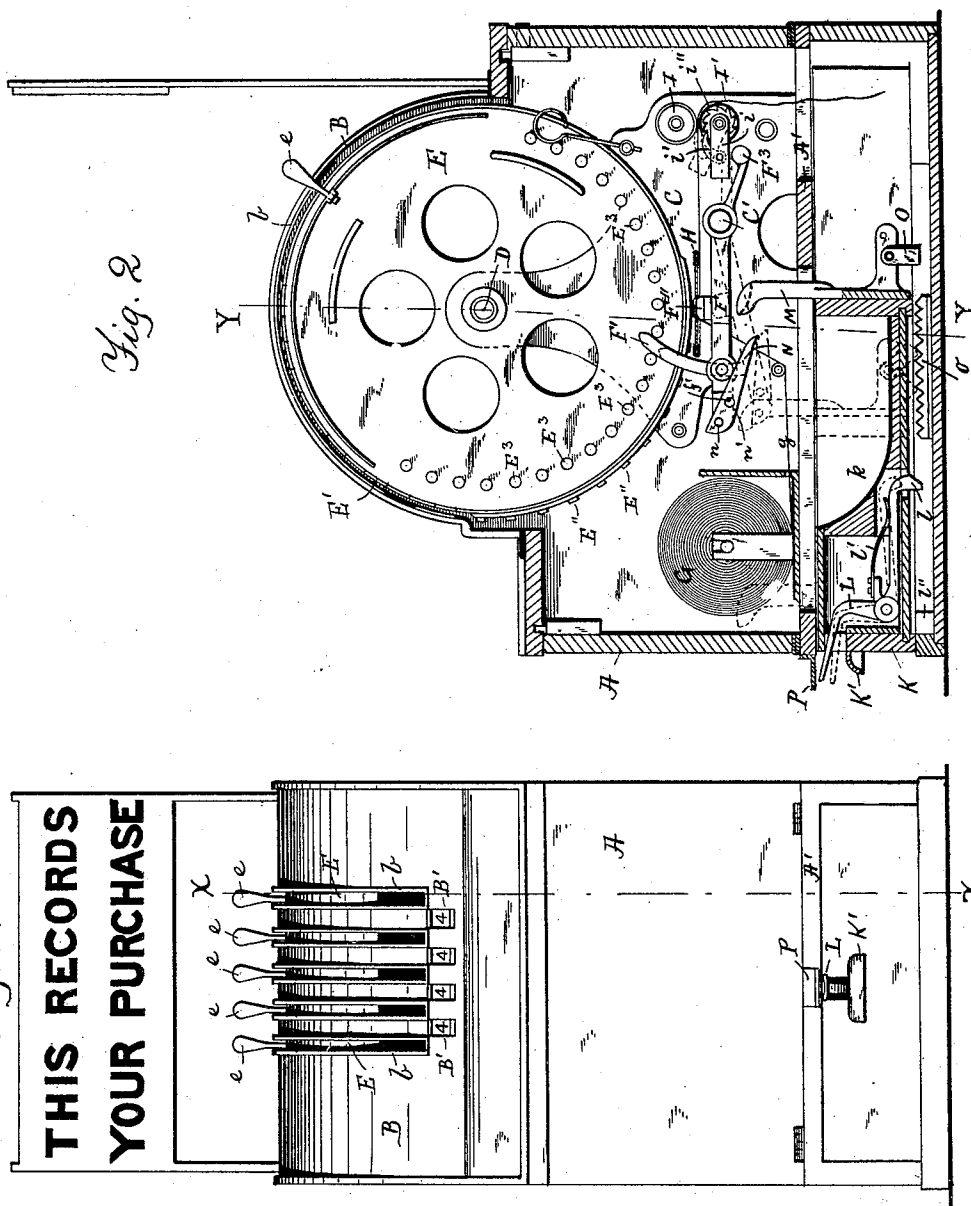
(No. Model.)

3 Sheets—Sheet 1.

J. F. GOODRIDGE.
CASH INDICATOR AND RECORDER.

No. 467,592.

Patented Jan. 26, 1892.



WITNESSES

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Alice A. Perkins.

INVENTOR

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Fig. 3.

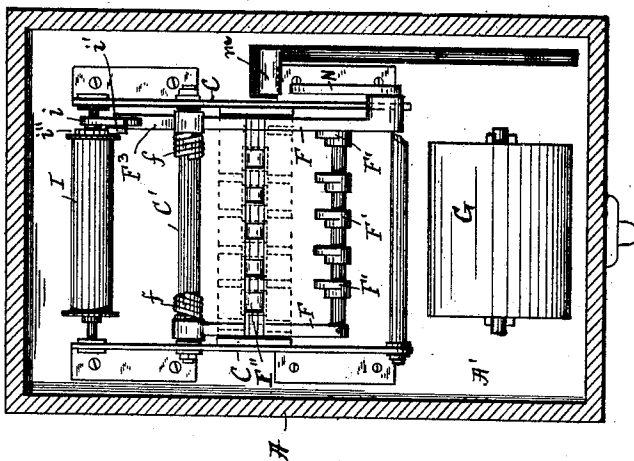


Fig. 4.

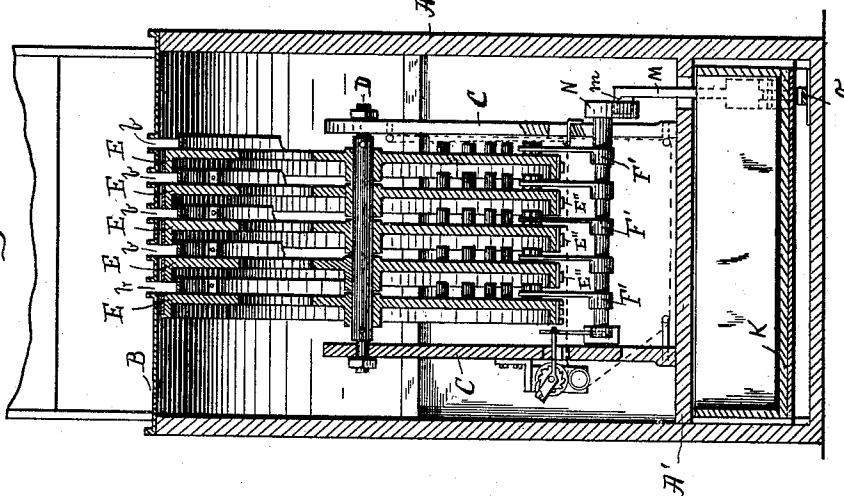
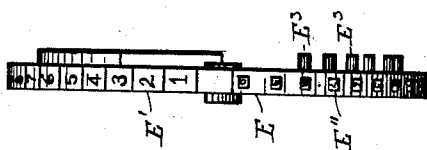


Fig. 5.



WITNESSES

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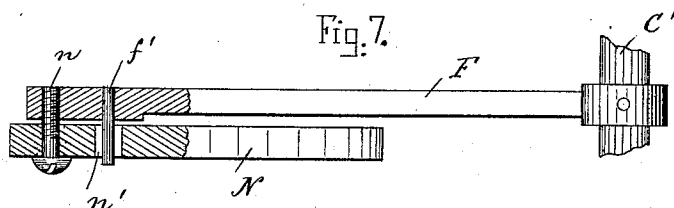
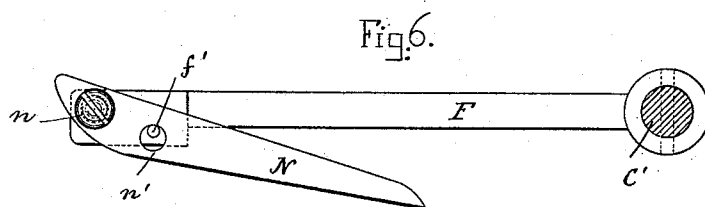
(No Model.)

3 Sheets—Sheet 3.

J. F. GOODRIDGE.
CASH INDICATOR AND RECORDER.

No. 467,592.

Patented Jan. 26, 1892.



Witnesses.

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Inventor

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UNITED STATES PATENT OFFICE.

JAMES F. GOODRIDGE, OF BOSTON, MASSACHUSETTS.

CASH INDICATOR AND RECORDER.

SPECIFICATION forming part of Letters Patent No. 467,592, dated January 26, 1892.

Application filed February 26, 1891. Serial No. 383,011. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. GOODRIDGE, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Cash Indicators and Recorders, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements on the patent for cash indicator and recorder granted to me February 10, 1891, No. 446,343, and it is carried out as follows, reference being had to the accompanying drawings, where-
in—

Figure 1 represents a front elevation of the invention. Fig. 2 represents a vertical section of the same on the line X X shown in Fig. 1. Fig. 3 represents a plan view showing the case in section and the type-wheels removed. Fig. 4 represents a cross-section on the line Y Y shown in Fig. 2, and Fig. 5 represents a detail end elevation of one of the type-wheels. Fig. 6 represents a detail side elevation of the locking-lever and its pivoted latch, and Fig. 7 represents a plan view thereof partly shown in section.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

This my present invention is similar in construction to the one shown and described in my above-mentioned patent, with the exception that instead of operating the locking-lever directly by hand it is arranged entirely within the case and operated by the opening of the cash box or drawer, the object being to compel the clerk or sale person in charge of the machine to open and close the drawer each time a sale is recorded. In other cash-recorders having indicating wheels or hands which are set before the amount is recorded the wheels can be set when the drawer is open or when it is closed, and on such machines it is possible for the person in charge to record one amount and setting the figures to represent that another amount has been recorded. With my present invention the type-wheels can only be set when the drawer is in a certain position, neither open or shut, and when

the drawer is in such position it cannot be pushed back until it has been opened, and such opening causes a record to be made on the tape, as will hereinafter be more fully described.

A is the case containing the mechanism, and B is its removable arched cover, as usual.

C C is the type-wheel-supporting frame, which frame is secured to the bottom board A' of the case A and has attached to its upper end the shaft or spindle D, upon which are loosely journaled, side by side, a series of type-wheels E E, like what is shown and described in my above-mentioned patent. Each type-wheel is independently adjustable upon the spindle D, and has for this purpose a handle *e*, projecting through a slot *b* in the cover B, as usual.

B' B' are the sight-openings in the cover B, E' E' the numerical indicators on each type-wheel periphery, and E'' E'' corresponding types thereon, as is shown and described in my aforesaid patent.

E³ E³ are the usual side projections or locking-pins on the type-wheels E, as shown in the drawings.

On a spindle C', secured to the frames C C, is pivoted the yoke-shaped locking-lever F, having locking-teeth F' F', adapted to enter the spaces between the type-wheel projections, as in my previous patent, such lever being normally held in a locked position relative to the type-wheels by means of suitable springs *f f*.

F'' is the transverse platen or pressure-bar on the lever F, which is automatically pressed against the paper ribbon *g*, causing the latter to be pressed against the ink-ribbon H and type upon the wheels E, and thus causing a record to be made on the ribbon *g* when the lever F is released. G is the reel from which the ribbon *g* is led over the pressure-bar F'' and between the feed-rollers I I', the spindles of which are journaled in the frames C C, as usual.

The paper ribbon is automatically fed by the lever F in any suitable manner. In Figs. 2 and 3 I have shown for this purpose a projection F³ on the lever F, acting on a pawl-carrying arm *i*, pivoted on the spindle of the

feed-roller I', said arm being provided with a pawl *i'*, adapted to engage with the ratchet-wheel *i''*, secured to the feed-roller I'.

I wish to state that I do not wish to confine myself to any particular mechanism for feeding the paper or ink ribbon, as this may be done in any suitable manner without departing from the spirit of my invention.

K is the drawer, arranged to slide forward and back in guides in the lower portion of the case A, said drawer having a cash-receptacle *k*, as shown in Fig. 2.

Within the drawer K is pivoted a knee-lever L, the outer end of which is made to project through a perforation in the front of said drawer, and its rear end having a catch *l*, projecting through a perforation in the bottom of the drawer and normally held so by the influence of a suitable spring *l'*. (Shown in Fig. 2.) *l''* is a stop projection in the front lower portion of the case A, against which the catch *l* comes to a stop when the drawer is pulled out without depressing the lever L. To the rear portion of said drawer K is secured an upwardly-projecting bar M, having at its upper end a side lip or projection *m*, (shown in Figs. 2, 3, and 4,) for a purpose as will hereinafter be described. At one side of the forward end of the lever F is hung at *n* a latch N, which is normally held, preferably by its own gravity, in the position shown in Figs. 2, 6, and 7. This may be done by means of a pin *f'*, secured to the lever F and passing loosely through an enlarged perforation *n'* in the latch N, as shown in Figs. 2, 6, and 7; but this particular mode of hanging the said latch is not essential, as it may be hung in any other suitable manner to the lever F with freedom to yield upward without departing from the essence of my invention. The side lip *m* on the bar M serves for the purpose of depressing the lever F by riding over the latch N as the drawer K is being partially pulled out to enable the type-wheels to be set according to the amount of the sale made. When the drawer is fully drawn out, the lever F is liberated from the latch N and moved upward by its springs *f f*, causing the paper ribbon to be printed. For the purpose of preventing the drawer from being pushed back after being only partially pulled out and before the bar M *m* has passed entirely beyond the latch N, I hang at the rear of the said drawer a pawl O, adapted to engage with a rack or toothed bar *o*, secured to the bottom of the case A, as shown in Fig. 2.

K' is a handle or pull on the forward end of the drawer K, by means of which the latter is pulled out. To prevent the depression of the knee-lever L when starting to pull out the drawer, I prefer to attach a shield or cover P to the case A directly above the outwardly-projecting end of the knee-lever K, as shown in Figs. 1 and 2.

The operation of the device is as follows:

To register a sale, take hold of the drawer-pull K' and pull the drawer out until it is stopped by the projection *l* coming in contact with the stop projection *l''*. This causes the dog or side projection *m* on the bar M to slide over and depress the latch N, by which the lever F is also depressed and its projections unlocked from the type-wheels, as shown in dotted lines in Fig. 2. Such depression of the lever F also liberates the pressure-bar F' from the paper ribbon *g* and causes the latter to be automatically fed forward the desired distance for receiving a new impression. The pawl O has during this movement of the drawer been brought in engagement with the ratchet *o* to prevent the drawer from being pushed back until it is first fully drawn out. The operator now sets the respective type-wheels according to the amount of the sale to be recorded, which setting is accomplished by taking hold of the handles *e* and adjusting the wheels until the desired amount to be recorded is seen through the sight-openings B' B'. The operator then depresses the lever L, causing the projection *l* to be raised and liberated from the stop *l''*, allowing the drawer to be pulled out until the till or tills *k* are exposed, and during such movement of the drawer the lever F is released by the side projection *m* on the bar M, passing entirely beyond and in front of the latch N, causing said lever F to swing upward by the influence of its springs *f f*, by which the pressure bar or platen F'' is forced against the paper ribbon *g* and causes an impression to be made on the latter by means of the type-wheels and ink-ribbon. During such exposure of the till or tills the pawl O is drawn entirely beyond the front end of the rack *o*, thus allowing it to ride freely over the latter as the drawer is being shut, until it again occupies the position shown in Fig. 2. During the closing of the drawer the side projection *m* on the bar M passes freely under the latch N and raises the latter without disturbing the position of the lever F.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent, and claim—

1. In a cash indicator and recorder, the combination of one or more independently-adjustable indicator and type-carrying wheels provided with lateral locking pins or projections, a pivoted wheel-locking lever having locking-teeth and a ribbon-pressing platen, said lever having a loosely-pivoted latch, and a till-drawer having a lip or projection adapted to actuate said latch and depress the locking-lever during the pulling out of the drawer and to pass by it without actuating said lever during the closing motion of the drawer, substantially as described.

2. In a cash indicator and recorder, the combination of one or more independently-adjustable indicator and type-carrying wheels

and locking-pins thereon, a pivoted wheel-
locking lever having locking-teeth and a rib-
bon-pressing platen, a loosely-pivoted latch
on said lever, a till-drawer having means for
5 actuating said latch in one direction, a pawl
for preventing the closing of said drawer be-
fore the locking-lever is liberated during the
outward motion of said drawer, and a lock-
ing device for limiting the initial outward
10 motion of the drawer to permit the adjust-

ment of the type-carrying wheels, substan-
tially as described.

In testimony whereof I have signed my
name to this specification, in the presence of
two subscribing witnesses, on this 21st day of 15
February, A. D. 1891.

JAMES F. GOODRIDGE.

Witnesses:

ALBAN ANDRÉN,
ALICE A. PERKINS.