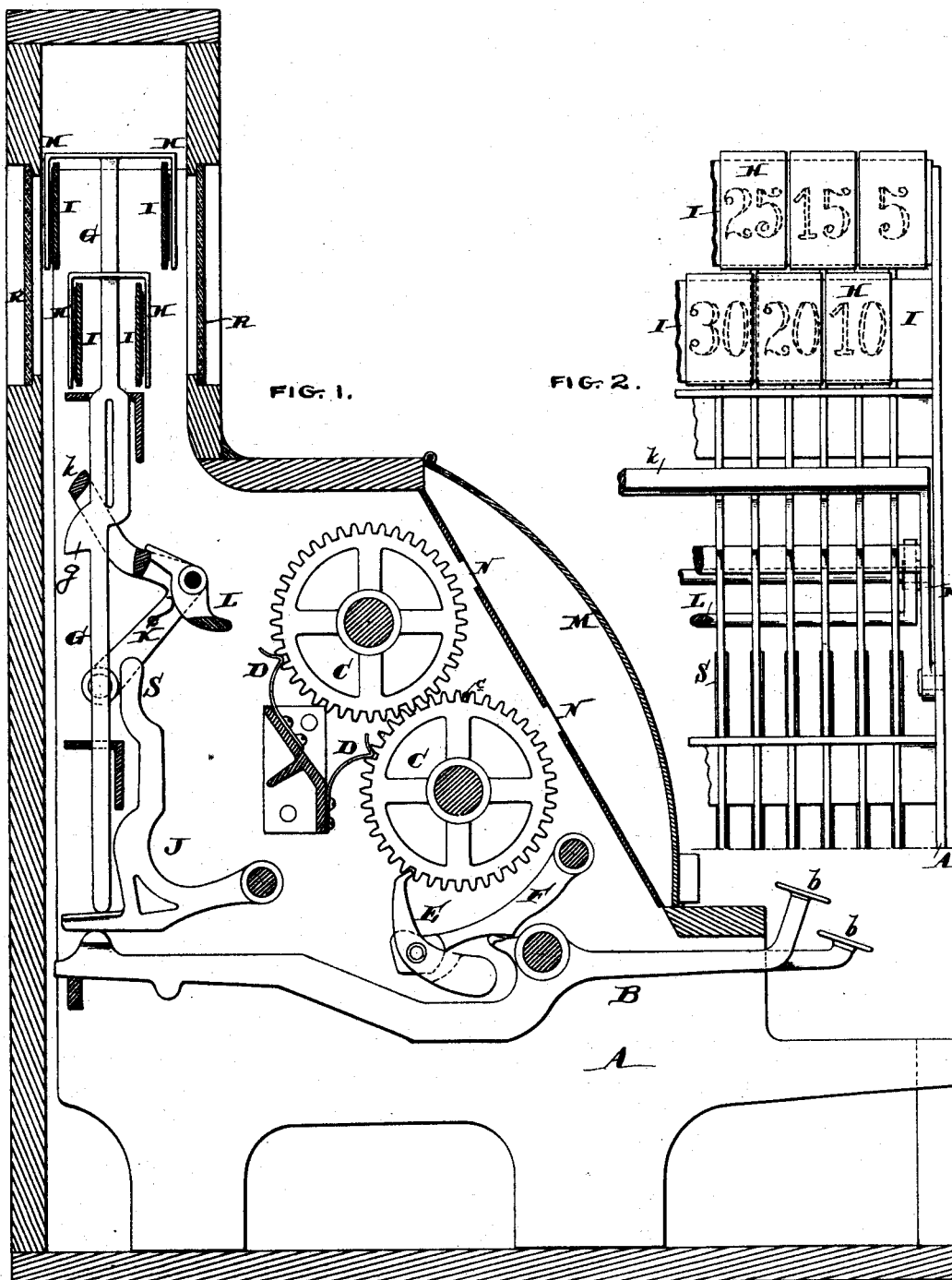


(No Model.)

H. A. HERR.
CASH REGISTER AND INDICATOR.

No. 421,074.

Patented Feb. 11, 1890.



WITNESSES:

Henry D. Dwyer
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INVENTOR:

Horace A. Herr
by his atty
[Signature]

UNITED STATES PATENT OFFICE.

HOMER A. HERR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO HERMAN S. FRIEDMAN, OF SAME PLACE.

CASH REGISTER AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 421,074, dated February 11, 1890.

Application filed September 28, 1889. Serial No. 325,414. (No model.)

To all whom it may concern:

Be it known that I, HOMER A. HERR, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Cash-Registers, of which the following is a specification.

My invention has reference to cash-registers; and it consists of certain improvements, all of which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

In my application, Serial No. 319,660, filed August 3, 1889, I describe a cash-register showing a form of indicating apparatus for indicating the amount of the purchase in which a stationary tablet is employed in connection with a movable shield or cover.

The present application is an improvement upon that application, and consists more specifically in providing two series of tablets with the figures or marks thereon so arranged that for every tablet facing in one direction there is a corresponding tablet facing in the opposite direction, so as to show the amount of the purchase from opposite sides of the machine, and with these double series of tablets I employ a double series of covers or shield-frames actuated in pairs, so as to simultaneously cover or expose the corresponding tablets of the two series. It is evident that the two stationary tablets may be arranged back to back or really formed into one plate or frame with the figures or marks placed upon opposite sides. These double covers or shield-plates are operated by rods or bars actuated by keys. A locking device is employed to hold the rods or bars in a raised position when exposing the tablets; but said locking device is operated automatically. The particular mechanism by which the covers or shield-plates are raised is immaterial to my invention. In connection with the indicating devices above referred to I combine recording or registering mechanism; but this latter may be of any suitable construction.

In the drawings, Figure 1 is a sectional elevation of a cash-registering machine embodying my invention, and Fig. 2 is a rear elevation of a portion of same.

A is the main frame of the machine, which may be constructed in any suitable manner.

B are the operating levers or keys, which are struck by the fingers, and by which the indicating apparatus and recording mechanism are operated.

C C are the recording-wheels, which are moved around by means of a pawl E, carried upon an arm F, actuated by the levers or keys B. The faces of these wheels have numbers marked upon them, which may be observed through the apertures N when the door or cover M is opened. The lower wheel C is directly actuated upon the pawl E, and is provided on its periphery with a pin *c*, adapted to actuate the upper wheel C after the said pin has made one revolution. The numbers of the upper wheel are therefore multiples of the numbers upon the lower wheel C.

D D are spring catches or pawls to prevent accidental or back rotation of the wheels C. Any other suitable registering mechanism may be employed in place of that here shown, and it is immaterial to my invention as to the particular mechanism for imparting the rotation to these recording-wheels. The rear end of the lever B actuates a pivoted arm J, upon which rests a vertical arm G, having the hook or projection *g* at or about its middle, and with the screens or covering-plates H H at its upper part. When the rod or bar G and covering-plates H are down, they cover the two tablets I I, whose outer faces are provided with figures or marks corresponding to the amount of the purchase and what is indicated upon the plates *b* of the key or lever B. When the bar G is raised, it is locked over the cross-arm *k* of the rock-arm K, which is pivoted to the main frame A. To the rear of the rock-arm K is pivoted a pawl-frame L, which is free to move in one direction independent of the arm K, but not in the other direction. The upper end S of the arm J strikes the under portion of the pawl and frame L, so as to force the upper part *k* of the part K from under the catch *g* of the bar G, and thereby allow it to fall. In returning, the end S tilts the pawl-frame in the opposite direction without disturbing the frame K, which has reset itself and is sup-

porting the bar last raised. This mechanism is substantially similar to what is set out in my application hereinbefore referred to.

It will be understood that there are a series of each of the parts from the levers B to the recording and indicating mechanism, and the parts are so arranged, as is customary in cash-registering devices, that the striking of one key or lever B liberates the bar G which was previously supported in an elevated position and locks the bar corresponding to the particular lever struck in the elevated position, so that at all times there is one of the bars G elevated, and consequently at least one pair of the tablets I exposed. The frame of the machine is provided with glass windows R upon each side of the machine, so that the amount of the purchase may be indicated from both sides of the machine.

It is quite evident that the tablets I of each pair might be formed of one plate, if so desired; but it is preferable to separate them, as shown, to allow more room for the bars G to work between them. As shown, the tablets are upon long transverse plates secured to the main frame A.

I do not limit myself to the exact mechanism herein set out for operating the various parts, as they may be modified in different ways to accomplish substantially the same result, my invention referring more particularly to the double tablets and double screen-plates.

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

1. In a cash-register, the combination of a case and a series of stationary tablets arranged below the upper part of the case, and on which are marked or formed figures facing in two diametrically-opposite directions indicating the amount of the purchase, with a series of pairs of movable covering-plates, one plate of each pair for each of said marked faces, an operating-key for each pair of covering-plates, and mechanical connecting devices between the key and movable covering-plates, whereby the depression of any key causes the corresponding covering-plates to be raised.

2. In a cash-register, the combination of a case and a series of stationary tablets arranged below the upper part of the case, and upon which are marked or formed figures facing in two diametrically-opposite directions indicating the amount of the purchase, with a series of pairs of movable covering-plates, one plate of each pair for each of said marked faces adapted to move upward to expose the figures on the tablets, a registering mechanism for each pair of movable plates and tablets for registering the amount of the purchases indicated upon the tablets exposed, an operating-key for each pair of movable covering-plates, and registering mechanism and mechanical connecting devices between the several keys and their corresponding register-

ing mechanism and movable covering-plates, whereby one movement of a key operates both.

3. In a cash-register, the combination of a series of tablets or frames having marks or figures arranged upon them so as to face both to the front and back of the machine and form a passage-way between them, with a series of frames or covers adapted to hide or expose the marks or figures, supporting and operating rods for said covers extending upward between the two rows of tablets, and hand-operated mechanism to cause a relative movement between the tablets and covers.

4. In a cash-register, the combination of a series of tablets or frames having marks or figures arranged upon them so as to face both to the front and back of the machine and form a passage-way between them, with a series of frames or covers adapted to hide or expose the marks or figures, supporting and operating rods for said covers extending upward between the two rows of tablets, hand-operated mechanism to lift the rods and covers, and a lock to lock said covers and rods when lifted to maintain the exposure of the marks or figures.

5. In a cash-register, two tablets or plates arranged back to back and provided upon their outer faces with marks or figures and forming a passage between them, in combination with an intermediate vertically-movable frame carrying at its upper end two covers adapted to be moved up or down in front of the two tablets and an operating-key to move said vertically-movable frame or bar.

6. In a cash-register, two tablets or plates arranged back to back and provided upon their outer faces with marks or figures and forming a passage between them, in combination with an intermediate vertically-movable frame or bar moving in the passage and carrying at its upper end two covers adapted to be moved up or down in front of the two tablets, registering mechanism for registering the amounts of the purchases indicated on the tablets, and an operating-key to lift said vertically-movable frame or bar and actuate the recording mechanism.

7. In a cash-register, two tablets or plates arranged back to back and provided upon their outer faces with marks or figures and forming a passage between them, in combination with an intermediate vertically-movable frame or bar moving in the passage and carrying at its upper end two covers adapted to be moved up or down in front of the tablets, an operating-key to raise said vertically-movable frame or bar and covers, and a lock to hold said covers in a raised position.

In testimony of which invention I have hereunto set my hand.

HOMER A. HERR.

Witnesses:

R. M. HUNTER,

ERNEST HOWARD HUNTER.