

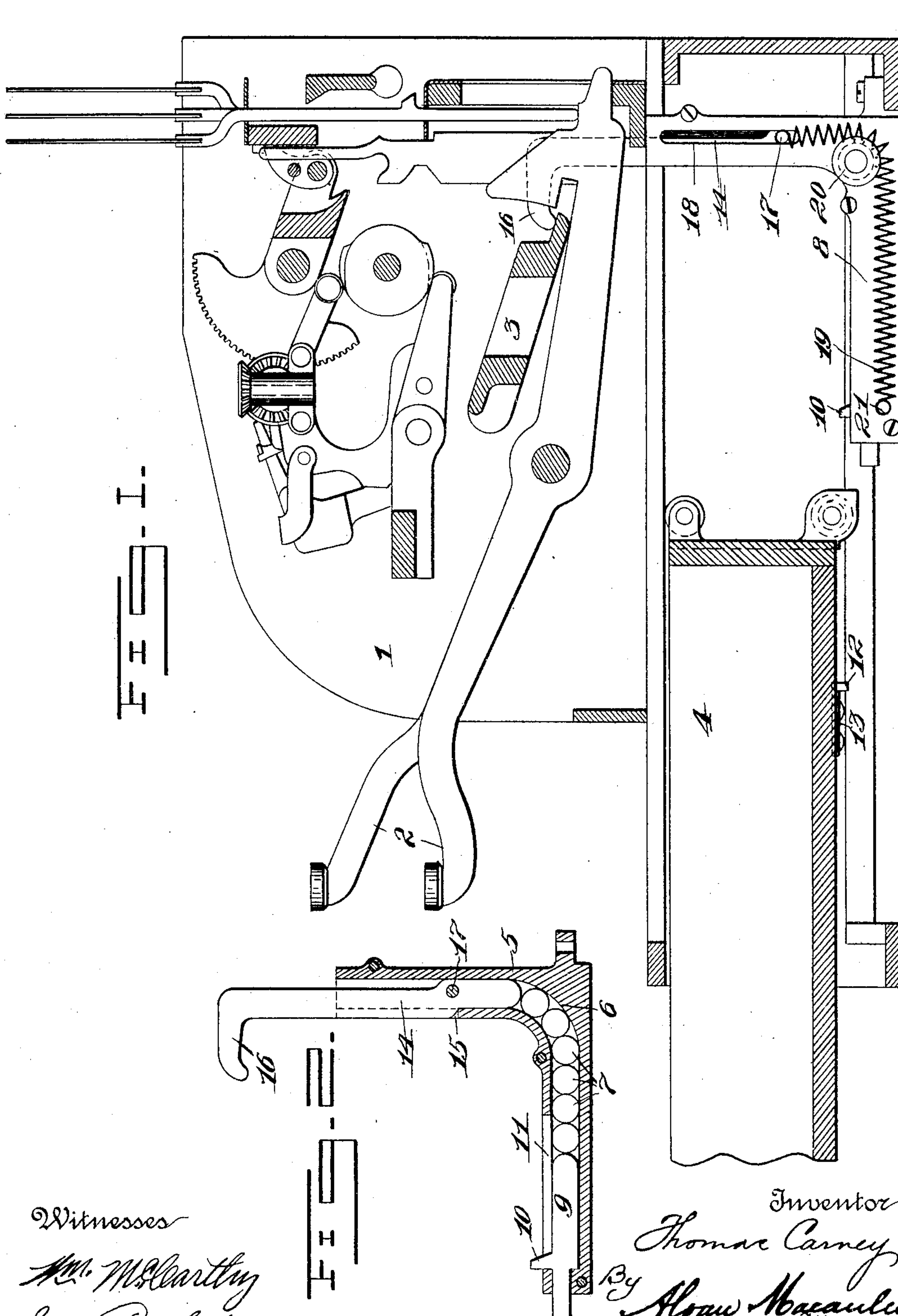
No. 671,950.

Patented Apr. 16, 1901.

T. CARNEY.
CASH REGISTER.

(Application filed Mar. 31, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS CARNEY, OF DAYTON, OHIO, ASSIGNOR TO THE NATIONAL CASH REGISTER COMPANY, OF JERSEY CITY, NEW JERSEY.

CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 671,950, dated April 16, 1901.

Application filed March 31, 1900. Serial No. 10,927. (No model.)

To all whom it may concern:

Be it known that I, THOMAS CARNEY, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Cash-Registers, of which I declare the following to be a full, clear, and exact description.

This invention relates to improvements in cash-registers, and has more particular relation to improvements in registers of the type shown and described in my Patent No. 536,015, granted March 19, 1895.

The object of the invention is to provide improved means for reducing the amount of power necessary to operate the keys of the machine.

In the appended drawings, forming part of this specification, Figure 1 represents a central vertical section through a machine of the type mentioned with my invention applied thereto, and Fig. 2 represents an enlarged detail vertical section through the spring device for returning the key-coupler and keys to normal position.

In the said drawings, 1 represents the frame of the machine; 2, the operating-keys; 3, the key-coupler, and 4 the cash-drawer.

The keys, key-coupler, indicators, and registering mechanism are substantially of the construction described in said patent with the exception that the returning-springs for drawing the key-coupler down after it has been elevated are omitted, and the keys are thus operated and elevate the coupler without having to overcome the tension of any returning-springs. As the work of putting springs under tension to return the key-coupler must be performed by some movable part of the machine, I provide devices as follows for throwing the work upon the cash-drawer: Just below and to the rear of the operating-keys I mount an angular frame 5, having a curved channel 6 formed therein for the reception of a plurality of steel operating-disks 7, said disks lying edge to edge and being held in position in said channel by a cap-plate 8 applied over the open side of the same. A slide 9 is mounted in the forward end of the lower

horizontal portion of the channel 6 and abuts against the outermost disk 7 in that portion of said channel. This slide is formed with a vertical shoulder 10, which projects through a slot 11 in the top of the angular frame into the path of a nose 12, formed on a plate 13, which is secured to the bottom of the drawer, whereby when the latter is closed said nose will engage the shoulder and force the slide 9 rearward. This rearward movement of the said slide causes the disks 7 to roll backward and upward through the channel 6. A slide 14 is mounted in the upper end of the vertical portion of the channel 6 and rests with its lower rounded end upon the uppermost disk 7. This slide, besides lying in the channel 6, also projects forward at its upper end into a slot 15, formed in the upper portion of the casing 5. The slide is further provided with a vertical hook extension 16 and a laterally-projecting stud 17, which latter extends through a vertical slot 18, formed in the cap-plate 8, and forms an attaching means for one end of a coil-spring 19. This spring extends down along the cap-plate and passes over a sleeve 20 and forward to a rigid stud 21, to which it is secured.

It will be observed from the above description that when the cash-drawer is closed the slide 14 will be elevated and held in this elevated position as long as the drawer remains closed. The aforesaid hook extension 16 projects over the pivoted key-coupler 3, to which the operated keys become locked, so that when the slide 14 is drawn down by the spring upon the opening of the cash-drawer the hook will draw the said key-coupler down also and return the keys which have been operated to normal position. It will further be seen that while the spring returns the key-coupler and keys to normal position its tension is not exerted upon the keys while they are being depressed, and they are therefore relieved of this portion of the load, which is thrown upon the cash-drawer.

It will of course be understood that when a key is depressed it releases the cash-drawer substantially as described in said patent, and thus leaves the slides 9 and 14 and the disks

7 free to be operated by the coil-spring, which has previously been put under tension by the closing of the drawer.

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

1. In a cash-register, the combination with a series of keys, of a frame arranged to be elevated by the operation of any of said keys, a slide carrying a hook adapted to engage said frame and draw it down, a cash-drawer, and a spring connected to said slide and arranged to be put under tension by the movements of said drawer.

2. In a cash-register, the combination with a series of keys, of a frame common to said keys, a cash-drawer, a frame having a channel or runway, a plurality of rolling devices mounted in said channel, slides mounted in said channel and arranged respectively to engage the drawer and the common frame and a spring connected to one of said slides so as to be put under tension by the operation of the drawer.

3. In a cash-register, the combination with a series of keys, of a key-coupler cooperating with said keys, a slide arranged to engage said coupler and draw it down after it has been elevated, a cash-drawer and a spring connected to said slide and arranged to be put under tension by the movements of said drawer.

4. In a cash-register, the combination with a series of keys, of a frame common to said keys, a spring for drawing said frame down after it has been elevated, a cash-drawer and a series of rolling devices arranged to be operated by the cash-drawer for putting the spring under tension.

5. In a cash-register, the combination with a series of keys, of a key-coupler, a cash-drawer, a frame having a channel formed therein, rolling devices in said channel, means for operating said rolling devices by the movement of the cash-drawer and a coupler-actuating spring arranged to be put under tension by said rolling devices.

6. In a cash-register, the combination with a series of keys, of a key-coupler, a cash-drawer, a frame having a channel formed therein, a slide mounted in the channel and arranged to engage the coupler, another slide mounted in the channel and arranged to be engaged by the cash-drawer, rolling devices mounted in the channel between the slides, and a spring connected to the coupler-slide.

In testimony whereof I affix my signature in the presence of two witnesses.

THOMAS CARNEY.

Witnesses:

IRA BERKSTRESSER,
ALVAN MACAULEY.