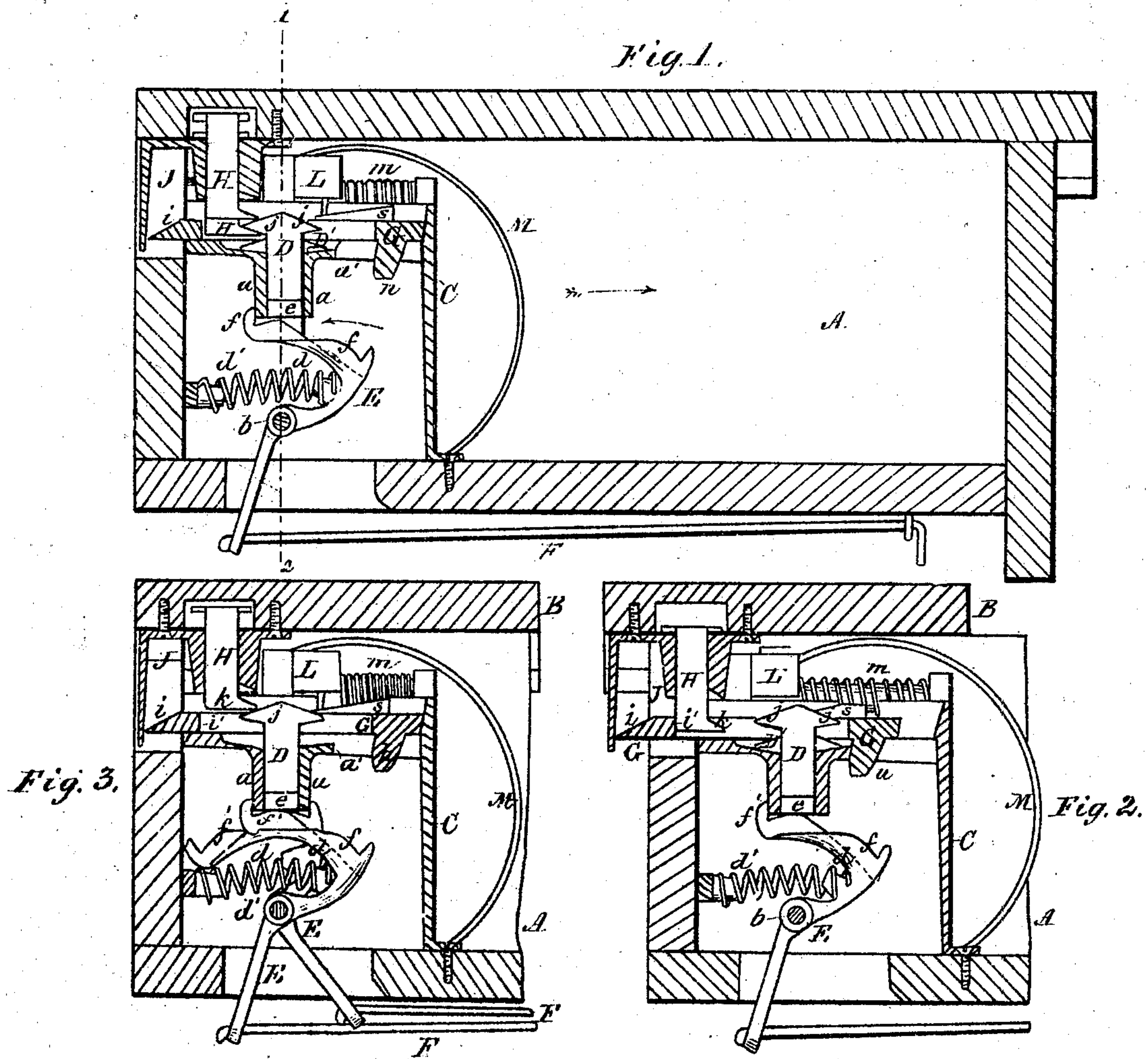


# J. J. Wagenhorst. Lock and Till Alarm.

Nº 74.639.

Patented Feb. 18. 1868.



Witnesses

Wm. Albert Steel.  
S. H. Godwin.

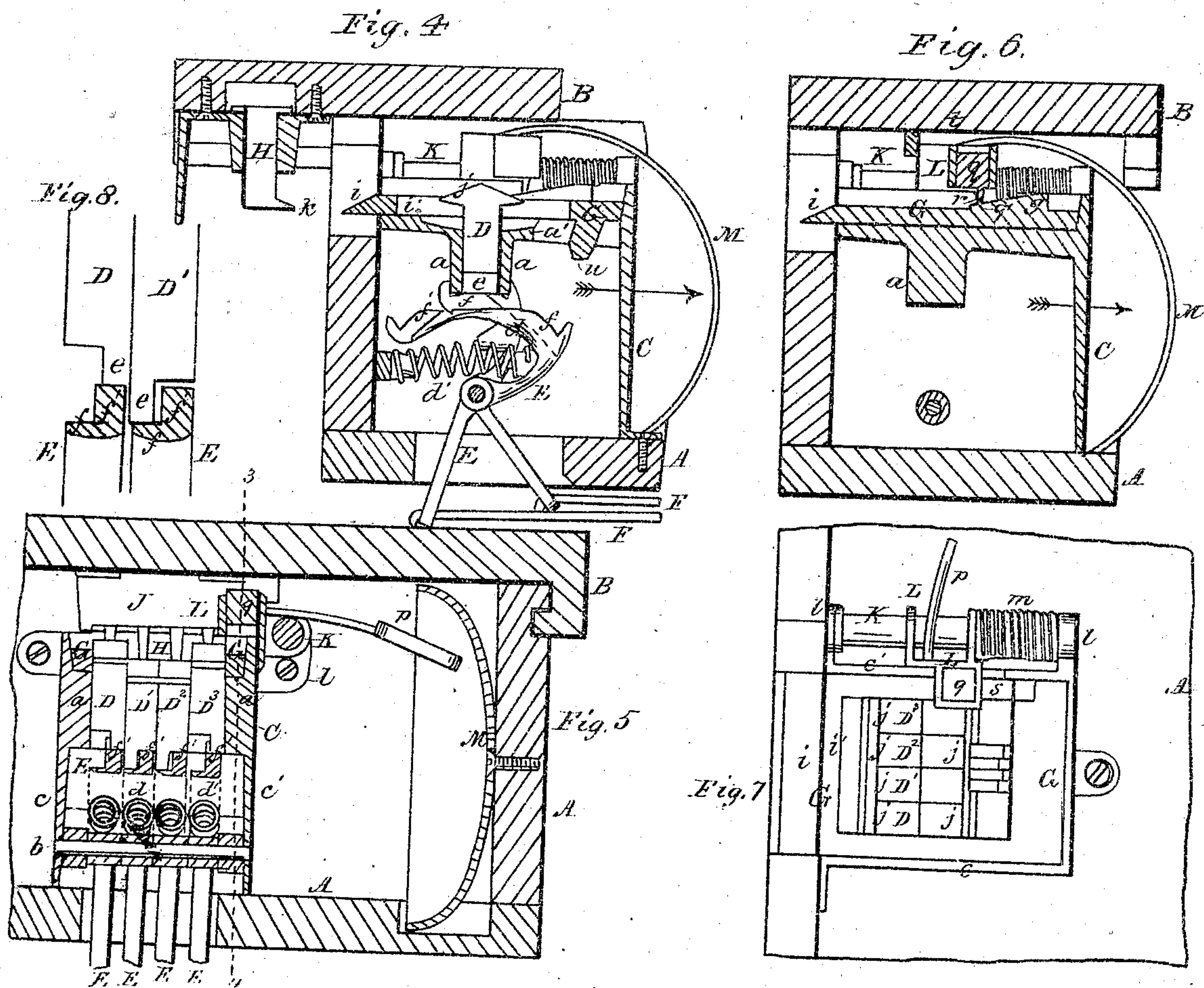
Inventor

J. J. Wagenhorst  
By his attorney  
H. H. Houson

*J. J. Wagenhorst.*  
*Lock and Till Alarm.*

*No 74,639.*

*Patented Feb. 18. 1868.*



*Witnesses*

*Wm Albert Steel,*  
*S. K. Godwin.*

*Inventor*

*J. J. Wagenhorst*  
*By his attorney*  
*H. H. Houson*



# United States Patent Office.

JAMES J. WAGENHORST, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR  
TO HIMSELF, C. H. ZINK, AND W. R. WEAND, OF SAME PLACE.

*Letters Patent No. 74,639, dated February 18, 1868.*

## IMPROVED TILL-ALARM AND LOCK.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. J. WAGENHORST, of Philadelphia, Pennsylvania, have invented an Improved Lock and Till-Alarm; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a lock of a peculiar construction, arranged and operating within a till, in combination with an alarm-device, so that an alarm will be sounded whenever an attempt to open the till is made by an unauthorized person.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figures 1, 2, 3, and 4 are sectional views of my improved lock and till-alarm, showing the parts in different positions.

Figure 5 is a transverse section of the same on the line 1-2, fig. 1.

Figure 6, a section on the line 3-4, fig. 5.

Figure 7, a plan view of part of the device; and

Figure 8 a detached view, drawn to an enlarged scale.

Similar letters refer to similar parts throughout the several views.

A represents a till, and B a portion of the counter, desk, or table, in which it slides, and on the under side of which is a projection, *t*, fig. 6, a lock-case, C, being secured within and at the rear end of the till, as shown in the drawing. Four levers, E, arranged side by side, are hung to a rod, *b*, secured to the opposite side plates *c* and *c'* of the lock-case, fig. 5; and on a projection, *d*, at the upper arm of each lever are two cams, *f* and *f'*, on which rest the lower ends of tumblers D, D<sup>1</sup>, D<sup>2</sup>, and D<sup>3</sup>, the latter sliding vertically between guides *a*, extending across the lock-case. The levers E are operated by rods F, which extend beneath the till, nearly to the front end of the same, and each lever has a tendency to remain in the position shown in fig. 1, owing to the action of a spiral spring, *d'*, which is confined between the lever and a cross-piece at the rear side of the lock-case. A portion of one side of each of the tumblers D is cut away, thus forming a narrow projecting lower end, *e*, which bears upon one of the cams *f* or *f'* of the adjacent lever E, (see figs. 1 and 8.) The position of each tumbler may be reversed, so that its projection *e* may rest upon either the cam *f* or the cam *f'*, and those cams are of such a shape that when the levers are in the position shown in fig. 1, the tumblers resting on the cams *f'* will be elevated and those on the cams *f* will be depressed, while, on moving the levers in the direction of the arrow, the vertical positions of the tumblers resting on the same will be reversed. In the present instance the tumblers D and D<sup>3</sup> rest upon the cams *f'* of the adjacent levers, and it will be evident from the construction of the cams that when the position of these levers is reversed these tumblers will be depressed. The tumblers D<sup>1</sup> and D<sup>2</sup>, on the contrary, rest upon the cams *f*, and will be correspondingly elevated when their levers are turned. A plate or frame, G, is arranged to slide upon the upper portion of the lock-case, its backward motion being limited by a lug, *h*, which strikes a flange, *a'*, on the guide *a*, and within the frame project the upper ends of the tumblers D and the lower ends of four bolts H, which slide vertically to a limited extent in a case, J, secured to the counter B, figs. 1 and 7. The outer edge *i* of the rear side of the frame G is bevelled, as shown in the drawing, for a purpose described hereafter. At the upper end of each of the tumblers D are projections *j*, the upper and lower sides of which are inclined, as shown in the drawing, and at the lower end of each of the bolts H is a lug, *k*, each of the latter, when the parts are in the position shown in fig. 1, resting upon one of the projections *j* of the tumblers. A rod, K, is secured to brackets *l*, projecting from one side of the lock-case, and a spiral spring, *m*, coiled upon the rod, bears against one end of a slide, L, a striker, *p*, projecting from the slide toward a bell, M, which is secured to one side of the till, figs. 5 and 6. The slide L projects over and is guided by the upper edge of the plate *c'* of the lock-case; and at the lower side of a block, *q*, which fits loosely in a hollow projection on the slide, is a lug, *q*, shown in fig. 6. Upon one side of the frame G is a lug, *s*, with an inclined face and abrupt shoulder, and when the striker *p* and slide are drawn back from the bell, the spring *m* is compressed, as shown in fig. 6, and the slide is maintained in this position by its lug, *q'*, which projects into a recess, *r*, of the plate *c'*. By moving back the plate G the inclined projection *s* is



brought beneath the lug  $q'$ , which is raised out of the recess  $r$ , thus releasing the slide, which is forced back by the spring, so that the striker is brought against the bell.

In fig. 1 the till is represented as closed, and the bolts H, which rest upon the tumblers D and  $D^3$ , are raised above the upper surface of the frame G, while the central bolts H, which rest upon the tumblers  $D^1$  and  $D^2$ , extend within the frame, and in front of the cross-piece at the rear of the same. If, while the parts are in this position, an unauthorized person attempts to draw open the till, the rear cross-piece of the frame G will be brought in contact with the central bolts H, which will prevent its further forward movement, while the drawer moves forward until the flange  $a'$  is brought against the lug  $h$ , when all further motion of the till will be prevented. Should the till now be moved back, the lug  $q'$  of the slide L will be raised by the inclined projection  $s$  of the plate G, thus releasing the striker and sounding an alarm, as before described, figs. 4 and 6. When the till is improperly drawn forward, the tumblers are moved away from beneath their bolts, and all fall to their lowest positions directly in the path of the rear cross-piece of the frame G, as shown in fig. 2. When the bolts are in this position it will first be necessary, in order to open the till, to depress the tumblers D and  $D^3$  by operating their levers through the medium of the rods F, and then to push the till back to its original position, fig. 1, the inclined projections  $j$  passing beneath the bolts. The rods F are then released, and the tumblers D and  $D^3$  and their bolts H are raised to their first position, fig. 1, by the action of the springs  $d'$ . The till may now be opened by raising the centre-bolts H clear of the rear cross-piece of the frame G, so that the latter shall be free to move with the till, this being effected on raising the tumblers  $D^1$  and  $D^2$  through the medium of their respective levers and rods F, (see figs. 3 and 4.)

In closing the till, the bolts H are raised by the bevelled edge  $i$  of the rear cross-piece of the frame G until they again rest upon the upper ends of the tumblers, the projection  $t$  on the counter striking the slide L, forcing it back, and compressing the spring  $m$  until the lug  $q'$  falls into the recess  $r$  in the lock-case.

As each of the tumblers D may be raised or lowered by reversing its position, the relative heights of the tumblers may thus be changed at any time, so that those acquainted with the operations required to open the drawer at one time will be unable to do so after a change in the position of the tumblers is made.

I claim as my invention, and desire to secure by Letters Patent—

1. The combination of the tumblers D and their projections  $e$  with levers E, on each of which are cams  $f$  and  $f'$ , all substantially as specified.
2. The spring-slide L, its striker  $p$ , and adjustable block  $q$ , in combination with the lug  $t$ , the sliding frame G, its projection  $s$ , and the recess  $r$ , in the case A, all substantially as and for the purpose specified.
3. The spring-slide L and its striker  $p$ , in combination with an alarm-bell, M.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES J. WAGENHORST.

Witnesses:

JOHN WHITE,  
W. J. R. DELANY.