F. H. PURINGTON.

Drawer or Till Alarm.

No. 45,435. Patented Dec. 13, 1864.

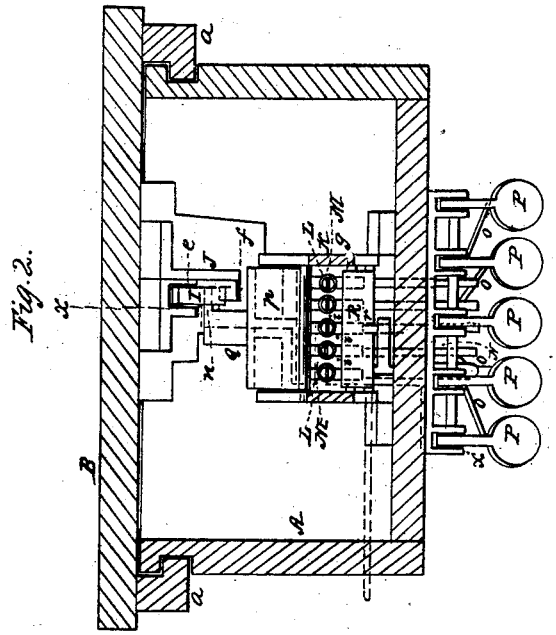

Fig. 2.

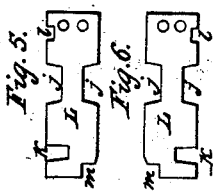

Fig. 5. Fig. 6.

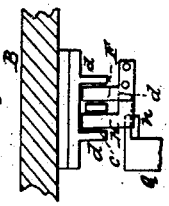

Fig. 4.

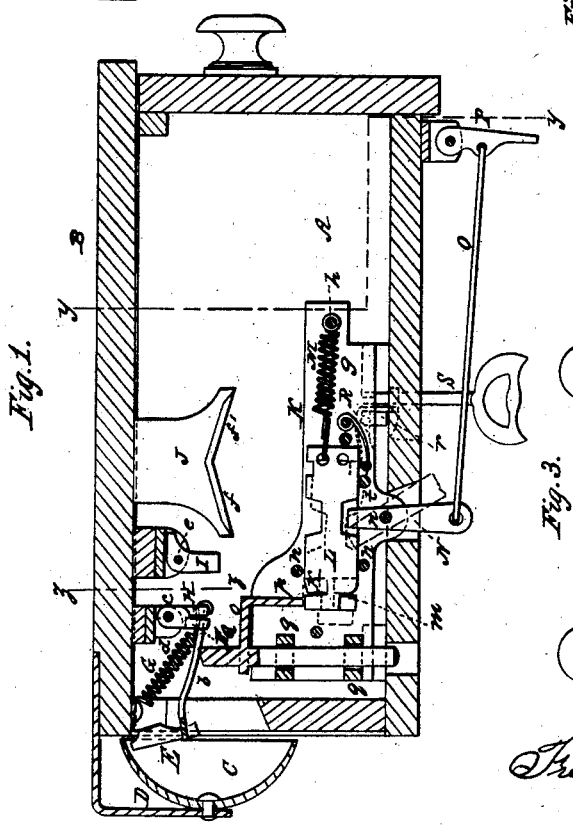

Fig. 1.

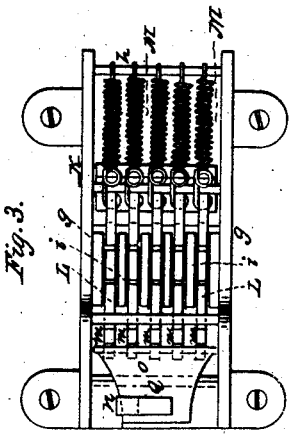

Fig. 3.

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FREDERICK H. PURINGTON, OF WILLIMANTIC, CONNECTICUT.

IMPROVED DRAWER OR TILL ALARM.

Specification forming part of Letters Patent No. **45,435**, dated December 13, 1864.

To all whom it may concern:

Be it known that I, F. H. PURINGTON, of Willimantic, in the county of Windham and State of Connecticut, have invented a new and Improved Drawer or Till Alarm; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a transverse vertical section of the same taken in the line *y y*, Fig. 1; Fig. 3, a detached plan or top view of the tumblers and bolt pertaining to the same; Fig. 4, a vertical section of a portion of a counter underneath which the drawer or till slides, *z z*, Fig. 1 indicating the line of section; Figs. 5 and 6, detached side views of tumblers pertaining to the same.

Similar letters of reference indicate like parts.

The object of this invention is to obtain an alarm mechanism for a drawer or till constructed and arranged in such a manner that an alarm not only will be sounded in case an attempt is made to open the drawer or till illegitimately, but a lock mechanism, which is combined with the alarm, will effectually prevent the opening of the drawer or till, so that the proprietor of a store will not depend upon the alarm solely to guard against pilferers, but will also have the lock which is provided with tumblers to aid in preventing such mode of thieving.

A represents a drawer or till, which is fitted between cleats *a a* underneath the counter B in the usual or any proper way.

C represents a bell which is attached to a bent arm, D, projecting down from the counter, and is directly in the rear of the drawer A, as shown in Fig. 1.

E is the bell-hammer, the rod *b* of which is attached to a bar, F, which is keyed on a rod, *c*, the latter being fitted in bearings *d d*, secured to the under side of the counter B. The bar F has a spring, G, attached to it, which spring has a tendency to cause the hammer to strike the bell after the former has been forced back, as hereinafter described. On this rod *c* there is placed loosely a bar, H, which is provided with a lateral arm or projection, *d*, the latter lapping over the bar F, as shown clearly in Fig. 4.

To the under side of the counter B, directly in front of the bars F H, there is an angular or bent bar, I, which is fitted loosely on a rod or shaft, *e*, as shown clearly in Figs. 1 and 2, and in front of the bar I there is attached to the under side of the counter B a pendant, J, the lower end of which is of double-inclined form, and has flanges *f f'* projecting laterally from it of the same shape, as will be understood by referring to Figs. 1 and 2. The above-described parts comprise all of those which are secured to the counter, and I will now proceed to describe those which are attached to and connected with the drawer or till A.

K represents a framing which is permanently attached to the bottom of the drawer or till, and is composed of two parallel sides, *g g*, connected by cross-pieces and rods *h*.

L represents a series of tumblers, which are fitted between guides *i* in the framing K and are allowed to slide freely therein. These tumblers have each a spiral spring, M, connected to them at one end, and each tumbler is notched at both edges, as shown at *j*, in Figs. 5 and 6. Besides these notches *j*, two other notches, *k l*, are made in one edge of the tumblers, and a notch, *m*, made in the opposite edge at the ends opposite to that where the springs M are connected.

N represents a series of levers which are fitted on a fulcrum-rod, *n*, at the bottom of the drawer or till. The upper ends of these levers N are fitted in the notches *j* in the lower edges of the tumblers L, and the lower ends are connected by rods O to finger-pieces P at the under side of the drawer or till A, near its front end. (See Figs. 1 and 2.) Five tumblers are represented in Fig. 3, but more or less may be employed, as desired.

Q represents a bolt the upper end of which is provided with a lateral projection, *n*, and a horizontal plate, *o*, having a pendent flange, *p*, at one edge. The main portion or stem of this bolt is fitted loosely in cross-bars *q* of the framing K, and is allowed to slide freely up and down therein, as will be understood by referring to Fig. 1.

R represents a plate which is fitted on a rod, *r*, in the framing K, and extends downward underneath the tumblers L, as shown clearly

in Fig. 1. This plate R has a rod or arm, *s*, projecting from it at about its center. (See Fig. 2 and dotted lines in Fig. 1.)

The operation is as follows: Suppose, for instance, the drawer or till A to be closed or shoved entirely in or underneath the counter B and the bolt Q to have an upward position, it being thus held by the flange *p* resting on the upper edge of one or more of the tumblers L, as shown in Fig. 1. Now, in case a person should attempt to pull out the drawer or till A with the bolt Q in this elevated position, the latter would strike the bar H, and in consequence of the arm or projection *d* of said bar lapping over the bar F, the latter will be actuated or thrown upward, and when released the spring G will force the hammer E in contact with the bell and give the alarm. The drawer or till, however, cannot be drawn out, in consequence of the bolt Q coming in contact with the bar I, the upper end of the latter bearing against the pendant in which it is hung or pivoted. In order, therefore, to open the drawer it is necessary to lower the bolt Q so that its upper end will clear the bar or stop I. This is effected by moving the tumblers on which the flange *p* of the plate *o* of the bolt Q rests, so that the notches *k*, which are in the tumblers, which support the bolt in an elevated state, may be brought in line with the notches *m* of the other tumblers, and thereby admit of the bolt dropping the requisite distance.

The tumblers which support the bolt in an elevated state are inverted, so that the notches *k* will be uppermost, while the others have their notches *k* underneath. It will be seen, therefore, that the tumblers are susceptible of quite a number of changes, as more or less of them may be inverted, as desired.

The tumblers are actuated or moved through the medium of the finger-pieces P, rods O, and levers N, and the springs M, the latter giving the return movement.

The difficulty in opening the drawer or till by the uninitiated consists in the ignorance of the position of the inverted tumblers, as only these should be moved in order to allow the bolt Q to drop. If any one of the others be moved, their notches *l* will catch over a rod, *t*, in the framing K, and the springs M cannot draw them back, and the bolt Q in that case cannot be dropped or lowered by actuating the finger-pieces P, and a key, S, must be inserted through the bottom of the drawer or till to act against the rod or arm *r* and throw up the plate R, which will raise the tumblers L so that their notches *l* will be free from the rod *t*, and the springs M can therefore draw them back. Thus it will be seen that if a thief attempts to open the drawer or till, he will not only sound the alarm, but by actuating the wrong tumblers, which he would invariably do, the drawer would be locked so as to require the key S to unlock it.

There is another important feature connected with the lock mechanism, which consists in raising the bolt Q after it has been lowered to admit of the opening of the drawer or till. This is effected by the lateral projection *n* of the bolt catching over the inclined flange *f* of the pendent bar J, said flange raising the bolt so that the springs M may draw the inverted tumblers L back underneath the flange *p*. The two inclined flanges *f f'* are necessary in case the bolt Q should be casually lowered while the drawer or till is open, the flange *f'* elevating the bolt when the drawer is shoved inward. In shoving in or closing the drawer the bolt Q shoves up the bars I H, as they are allowed to swing freely in the direction to admit of that result, so that the bolt may pass them.

I would remark that in cases where the locking of the tumblers may not be required a rod may be passed through the lower part of the framing K to keep the tumblers off from the catch-rod *t*. This rod is shown in red and in the act of being inserted in Fig. 2.

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

1. The vertically-sliding bolt Q, in combination with a series of tumblers, L, arranged with springs and notches in the manner substantially as shown, to operate in connection with a bell-alarm and stop I, for the purpose specified.

2. The pendant J, provided with the two inclined flanges *f f'*, in connection with the lateral projection *n* on the bolt Q, substantially as and for the purpose set forth.

3. The notches *m k l* in the tumblers L, in connection with the catch-rod *t* and the plate R, all arranged as and for the purpose specified.

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