

W.H. Tucker.

Lock for Alarm-Tills.

No. 119,202.

Patented Sep. 19, 1871.

Fig 1.

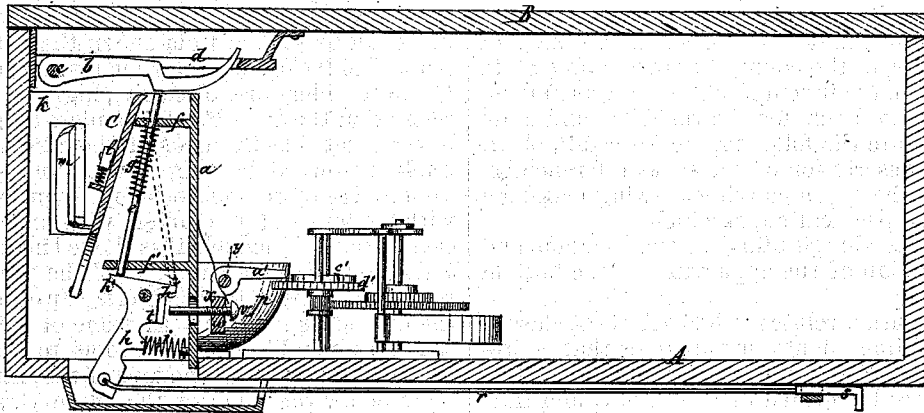
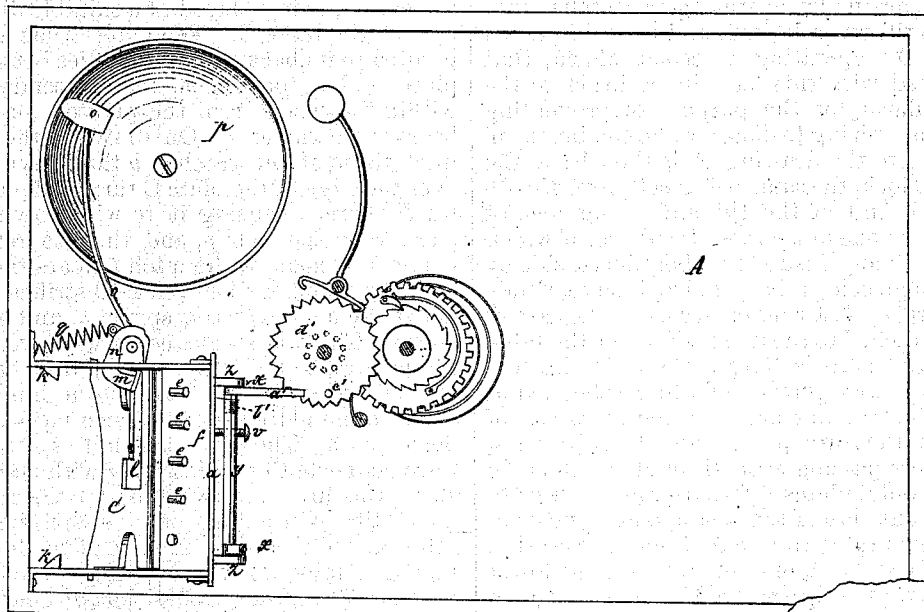


Fig 2



Witnesses:

H. J. Treitz
Thos. C. Conrad

Inventor:

W.H. Tucker.

PER

Wm. R. C.
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM H. TUCKER, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN ALARM-LOCKS FOR TILLS.

Specification forming part of Letters Patent No. 119,202, dated September 19, 1871.

To all whom it may concern:

Be it known that I, WILLIAM H. TUCKER, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Lock for Alarm-Tills; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a longitudinal vertical section, and Fig. 2 is a plan of the apparatus in the bottom of the till.

This invention relates to locks for that class of tills for holding money or valuables that is provided with alarms which sound when the till is attempted to be opened burglariously, and thus attract the attention of those within hearing; said invention appertaining to the species of lock termed "combination," and consisting in an improved apparatus for operating the catches that secure the till when locked, and in an improved apparatus for operating a second alarm, that is connected with this lock, in addition to the ordinary alarm, for the purpose of preventing persons from trying to discover the combination.

Referring to the drawing, A is the till; *a*, the case of the lock, the same being set up vertically at the back end of the till, and being open at the top. *b* is one of a series of catches, of which there may be any desired number placed side by side, the same being all pivoted at their rear ends upon a wire, *c*, that runs crosswise of the case *d*, which is attached to the under side B of the table or counter. There is nothing new in the construction or arrangement of the catches *b* and case *d*. The catches are operated by means of tumblers *e*, that are placed under the catches, said tumblers passing each through holes made in the horizontal plates *f f'* that project inwardly from the front side of the case *a*, and being combined with spiral springs *g* that tend to draw the tumblers downward, and resting at their lower ends on the tops of three-armed levers *h*, of which there are as many as there are catches or tumblers, which levers are all pivoted side by side upon a wire, *i*, that runs across the case *a*. Springs *j* are placed between the lower arms of the levers *h* and the front side of the case *a*, which springs tend to throw the levers inward so as to keep their arms *h¹* higher than the arms *h²*. In the plate *f'* there are two holes over each lever

h, one over each arm of the latter, and the tumblers can be shifted from one of the holes in the plate *f'* to the other, and when resting on the arm *h¹* the tumblers are, of course, higher than when resting on the arms *h²*. C is a plate hinged at its lower corners to the ends of the case *a*, and extending upward in rear of the tumblers *e*, the upper edge of this plate being about on a level with the tops of the tumblers when in their highest position. When the till is shoved in the catches *b* slide over the upper edge of the plate C and rest on the tops of the tumblers. In order to lock the draw it is necessary that one or more of the tumblers should be shifted so as to rest on the arms *h²*, which brings the tops of the shifted tumblers below the edge of the plate C, and, consequently, causes the latches that are above the shifted tumblers to fall below the edge of the plate. Lugs *k* extend inward from the ends of the case *a*, being placed at a suitable distance in rear of the plate C. The plate C has a latch, *l*, pivoted to its back, which latch lies between said plate and a tongue, *m*, that extends upward within the case *a* from the pivoted plate *n* that bears the hammer *o*. On drawing the till outward those of the catches *b* that have dropped over the edge of the plate C turn said plate backward, thereby causing it to withdraw the hammer *o* from the bell *p*, and then to release the hammer as soon as the latch *l* clears the tongue *m*. The hammer when released strikes the bell, under the action of the spring *q*, and gives the alarm. The plate C moves outward with the till till the former strikes the lugs *k*, when both plate and till are stopped. There is nothing new as respects the plate C or the alarm mechanism, or the levers *h*. The lower extremities of the levers *h* are connected by pull-wires *r* with sliding handles *s*, that are suitably secured to the under side of the till. On pulling out those of the handles *s* that are connected with such of the levers *h* as support tumblers on their arms *h²*, these tumblers are raised, and the catches that rest on them are elevated to the height of the edge of the plate C, thus unlocking the till. But, on pulling one of those handles, *s*, that are connected with such of the levers *h* as support tumblers on their arms *h¹*, the effect is to lower the tumblers, and, consequently, to lock the till. In other words, the till is unlocked by pulling the right handles and locked by pulling the wrong handles. Hence

the person tampering with the till can never know whether the handle he pulls is one of those that lock or unlock the till without actual trial, and a trial he cannot make without sounding the alarm. The levers h are all constructed with square shoulders t , and in front of each of these shoulders a hole is made in the case a large enough to admit freely a pin or screw, v , which extends through said hole from a horizontal bar, w , that is hung by means of lugs x upon a rod, y , which is supported in lugs z that project from the front of the case a . One of the lugs x has an arm, a' , extending at right angles away from the case a . A spring, b' , coiled around the rod y , tends to keep the arm a' horizontal. The latter serves as a stop for the pin c' that extends from the upper side of the horizontal spur-gear d' , which forms part of a mechanism that operates the second alarm. One or more of the screws v may be used, and the points of the same can be set as near the levers h as desired. The person tampering with the till cannot know which one of the levers h the screw v is placed opposite to, and he is, therefore, as likely to pull this lever as any other. The effect of pulling one of the levers h against the screw v is to throw the latter outward and raise the arm a' away from the pin c' , whereupon the mechanism of the second

alarm is at once set in motion and the alarm sounded. The operation of the mechanism which sets free the second alarm is, therefore, to prevent persons from trying to find out the combination. It will be observed that the tumblers reciprocate in straight lines, being in this respect different from the tumblers of some other locks which swing on pivots.

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

1. The straight tumbler or tumblers e , passing at will through either of two orifices in plate f' , and resting upon either arm h^1 or h^2 of the lever or levers h , and operating to raise the catches b from the plate C , or to lower them past said plate so as lock or unlock the till.

2. The lever or levers h combined with the screw or screws v , the bar w , rod y , and arm a' , for the purpose of checking or releasing the mechanism of the second alarm.

To the above specification of my invention I have signed my hand this 31st day of March, A. D. 1871.

WM. H. TUCKER.

Witnesses:

SOLON C. KEMON,
THOS. D. D. OURAND.