No. 651,008. Patented June 5, 1900.

R. L. DORSEY.

ALARM MONEY DRAWER.

(Application filed Oct. 23, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

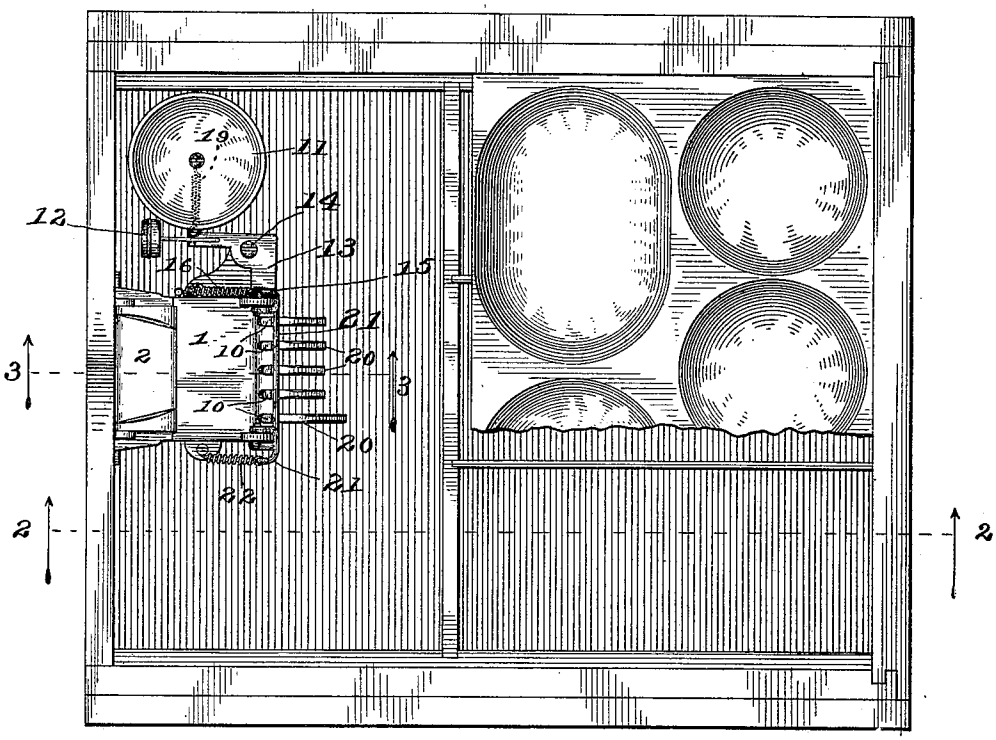
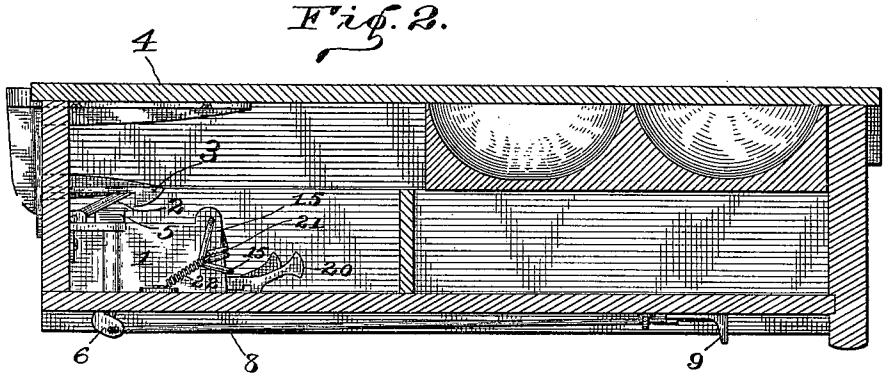


Fig. 2.



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Fig. 5.

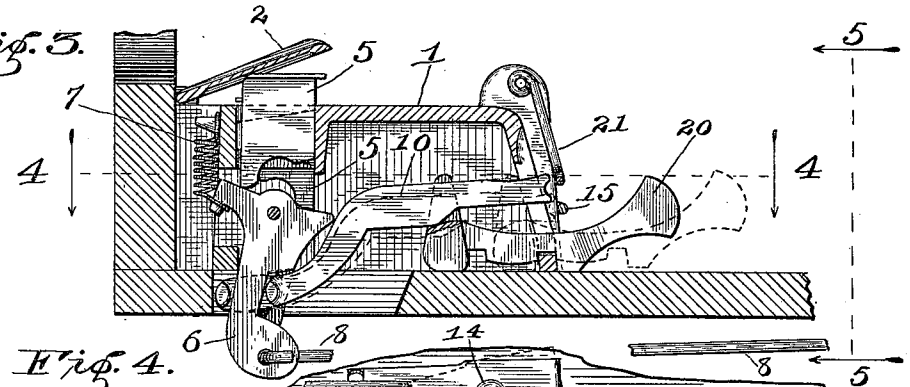


Fig. 4.

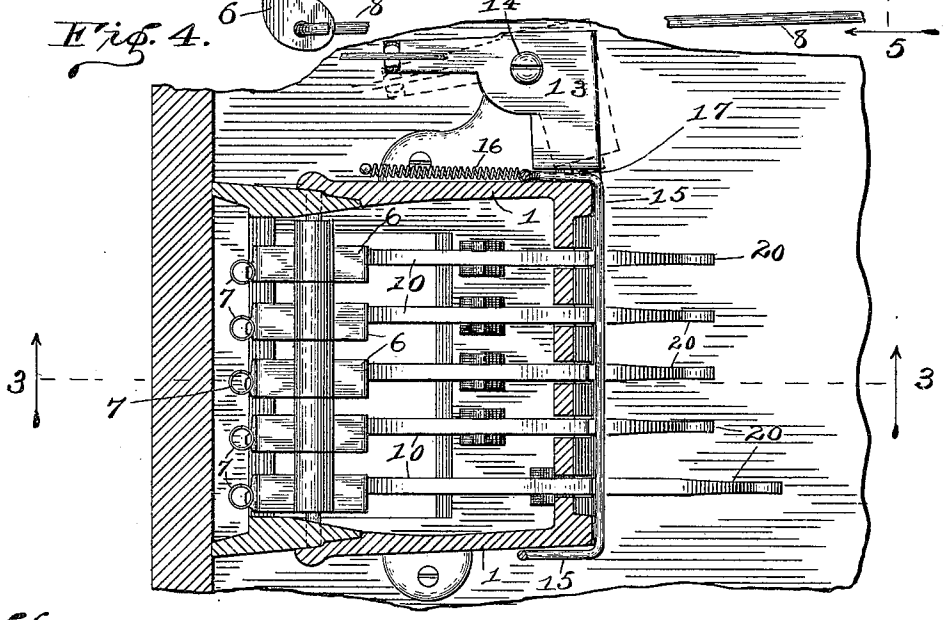


Fig. 6.

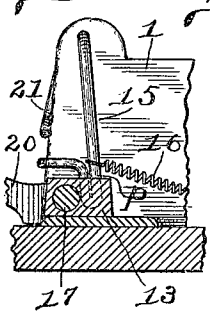
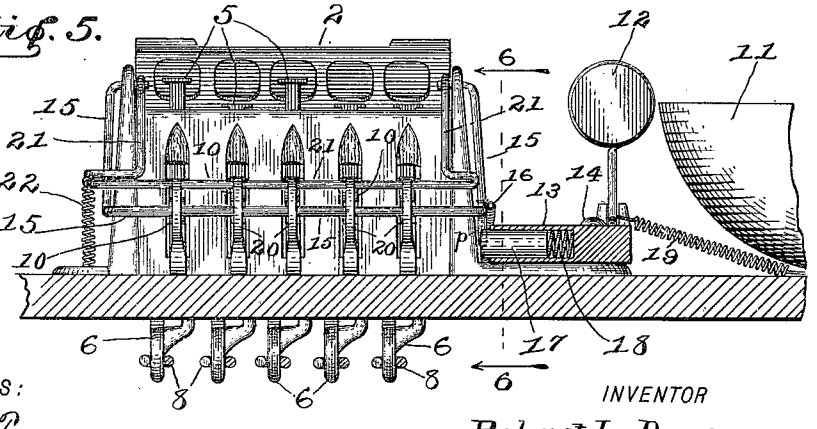


Fig. 5.



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UNITED STATES PATENT OFFICE.

ROBERT L. DORSEY, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE TUCKER & DORSEY MANUFACTURING COMPANY, OF SAME PLACE.

ALARM MONEY-DRAWER.

SPECIFICATION forming part of Letters Patent No. 651,008, dated June 5, 1900.

Application filed October 23, 1899. Serial No. 734,555. (No model.)

To all whom it may concern:

Be it known that I, ROBERT L. DORSEY, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Alarm Money-Drawers, of which the following is a specification.

My present invention relates to that class of devices principally used in retail places of business, known as "alarm" tills or money-drawers.

It principally consists in a means for controlling the alarm, whereby said alarm may be caused to operate or permitted to remain inoperative at will.

An alarm apparatus for tills or money-drawers embodying said invention will be first fully described and the novel features thereof then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a top or plan view of a money drawer or till provided with a combination lock and alarm embodying my said invention, the cover of the till or drawer being removed to show the interior; Fig. 2, a longitudinal vertical sectional view of such a drawer or till, showing the lock in side elevation; Fig. 3, a sectional view of the lock and immediately-adjacent parts, as seen from the dotted lines 3 3 on Figs. 1 and 4, on an enlarged scale; Fig. 4, a detail plan view of such portions of the lock as may be seen from the position indicated by the dotted line 4 4 in Fig. 3; Fig. 5, a detail front elevation of the lock and immediately-adjacent parts as seen from the dotted line 5 5 in Fig. 3, and Fig. 6 a detail view as seen from the dotted line 6 6 in Fig. 5.

The till or drawer, generally speaking, is or may be of any usual or desired form and needs no special description. The combination lock and alarm therein is in its general construction and arrangement much the same as those used in money-drawers heretofore made and generally known as the "Tucker" alarm-till. The lock consists, generally speaking, of a suitable casing 1, a pivoted latch 2, with which a stationary catch 3, secured to the cover 4, is adapted to engage when the drawer or till is pushed into place, a series of reversible tumblers 5, positioned under said latch, which are adapted to be held up into contact therewith or not, according to the position in which they are placed, pivoted levers 6 for operating said tumblers, springs 7, by which said levers are normally held to their rearmost position, pull-rods 8, terminating in finger-catches 9, by which said levers may be operated in the other position, and plungers 10, by which the alarm mechanism is actuated. The alarm mechanism also is in many respects similar to that heretofore used, and consists of an alarm-bell 11 and a hammer 12, carried by a bell-crank lever 13, which lever is mounted on a pivot 14. A bail-like rod 15 is positioned in front of the lock and engages with the bell-crank lever at or near one end and is arranged in front of the plungers 10, so that said rod serves as the means through which said plungers may actuate the bell-crank lever and bell-hammer. The rod 15 is held to its retracted position by a spring 16 and, as above indicated, is forced forward from time to time by the plungers 10. Within a socket in the adjacent arm of the bell-crank lever 13 is a catch 17, mounted against a spring 18, with which an arm or projection *p* on the rod 15 engages. These parts, however, at an appropriate point in the movement of the device will become sufficiently disengaged so that the catch 17 will escape from the projection *p* sufficiently to permit the bell-crank lever to be moved back to its primary position. The movement is occasioned by the spring 19, which acts quickly and causes the hammer 12 to strike the bell and give the alarm. The parts are so arranged, however, that the catch 17 does not entirely pass the projection *p*, and thus when the pull on the rod 15 is released said rod is permitted to travel back under the force of the spring 16 to its primary position, with its projection *p* behind the catch 17 ready for a new operation.

Referring now especially to Fig. 3, it will be seen that each plunger 10 is provided with a shifter 20, which may be pushed in or pulled out, and thus occupy either of the positions indicated, one by full lines and the other by dotted lines. When the shifter 20 is pushed

in, it comes in contact with an inclined surface on the under side of the corresponding plunger 10, raising said plunger until it is above the rod 15, so that when pulled forward it will not come in contact with said rod, and thus will not operate to ring the alarm. When the shifter is pulled out, however, the plunger 10 drops down into registry with said rod 15. Thus by merely moving such of the shifters 20 as may be desired the corresponding plungers are thrown into or out of operative relation with the rod 15 and the alarm-operating mechanism, and this irrespective of whether the corresponding tumblers 5 are in one position or the other. It is necessary, however, to provide some means by which it may be rendered impossible to detect which plungers are in engagement with the bell operating mechanism and which not. I have therefore provided a separate rod 21, similar to the rod 15 and held back by a spring 22 of about the same tension as the spring 16, which bar 21 is in such position that the plungers 10 will come in contact therewith when the shifters 20 are pushed into the position indicated by the full lines in Fig. 3. This bar 21 serves no other purpose, but is merely to render the true condition of the apparatus undetectable from any manipulation of the lock through the finger-pieces and attached rods and levers. As will be readily seen, therefore, locks embodying this invention may be so manipulated as either to ring the alarm when the combination upon which the lock is set is pulled, to ring the alarm when any other than the proper combination is pulled, to ring an alarm whenever the lock is pulled, whether upon the combination or not, or to ring no alarm, as the judgment or fancy of the user may dictate. In other words, either one or all or none of the pulls may be put into engagement with the alarm mechanism irrespective of whether they are or are not a part of the combination on which the lock is set.

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

1. The combination, in a lock-and-alarm apparatus, of the tumblers, levers for actuating said tumblers, plungers operated by said levers, shifters whereby the forward ends of said plungers may be shifted to either of two different positions, a spring-retained rod lying in front of one of said positions and arranged to engage with a bell-crank lever embodying a bell-hammer, said bell-crank lever having a spring-mounted catch by which the engagement with said rod is rendered effective, and a bell adjacent to the bell-hammer.

2. The combination, in a lock-and-alarm mechanism, of a bell, a bell-crank lever pivoted adjacent thereto and provided with a spring-catch on one of its arms and a bell-hammer on the other, a rod arranged in front of the lock mechanism adapted to engage with the catch on the bell-crank lever, a spring for holding said rod to its normal position, a series of plungers arranged within the lock, shifters for said plungers whereby they may be shifted into and out of position to engage with said rod, the tumblers, levers for operating said tumblers and said plungers, and pulls for operating said levers.

3. The combination, in a lock-and-alarm mechanism, of tumblers, levers for operating said tumblers, plungers operated by said levers, shifters for shifting the position of the forward ends of said plungers, two rods arranged alongside the lock in the paths of the plungers in their two positions respectively, springs for holding said rods rearwardly with a substantially-equal tension, a connection between one of said rods and the bell-hammer of the alarm mechanism, said bell-hammer, and an appropriate bell, whereby, in operating the lock mechanism, the alarm mechanism is enabled to be operated or not as desired, while an equal resistance to the pull is always maintained through the two rods, one of which is idle and the other of which is arranged to operate the alarm, substantially as set forth.

4. The combination, in a lock-and-alarm mechanism, of a suitable lock mechanism, a series of plungers operated therefrom, a series of shifters for operating said plungers whereby their forward ends are shifted to either of two different positions, spring-held rods lying in front of the two positions which said plungers occupy, a bell-hammer-actuating device, and a suitable connection between one of said rods and said bell-hammer-actuating device, substantially as and for the purposes set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 19th day of October, A. D. 1899.

ROBERT L. DORSEY. [L. S.]

Witnesses:
CHESTER BRADFORD,
JAMES A. WALSH.