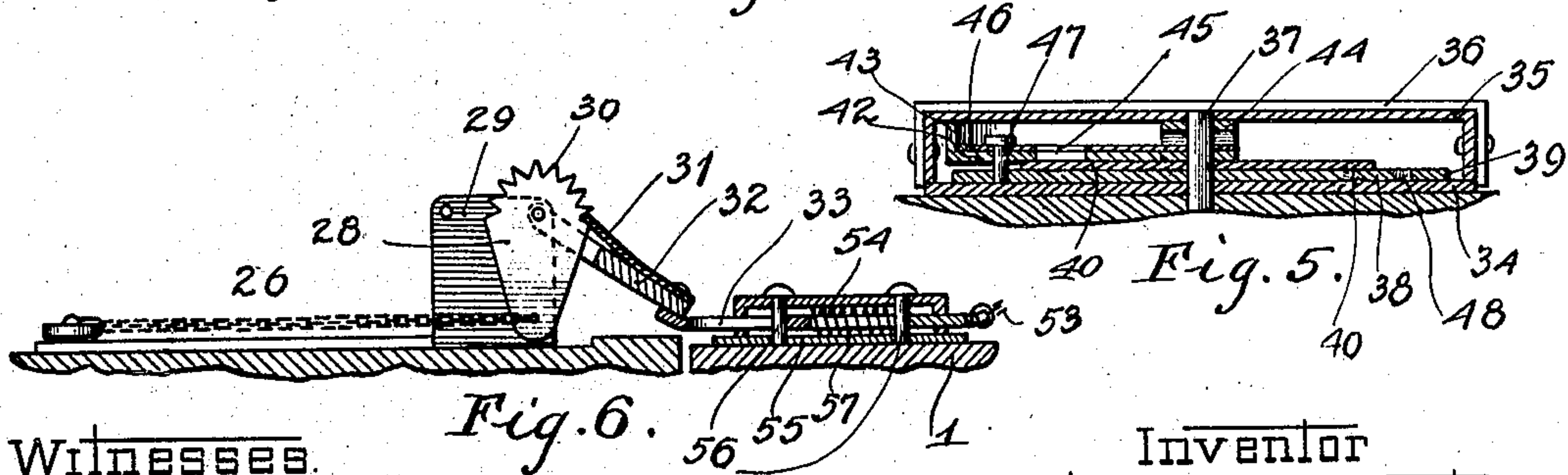
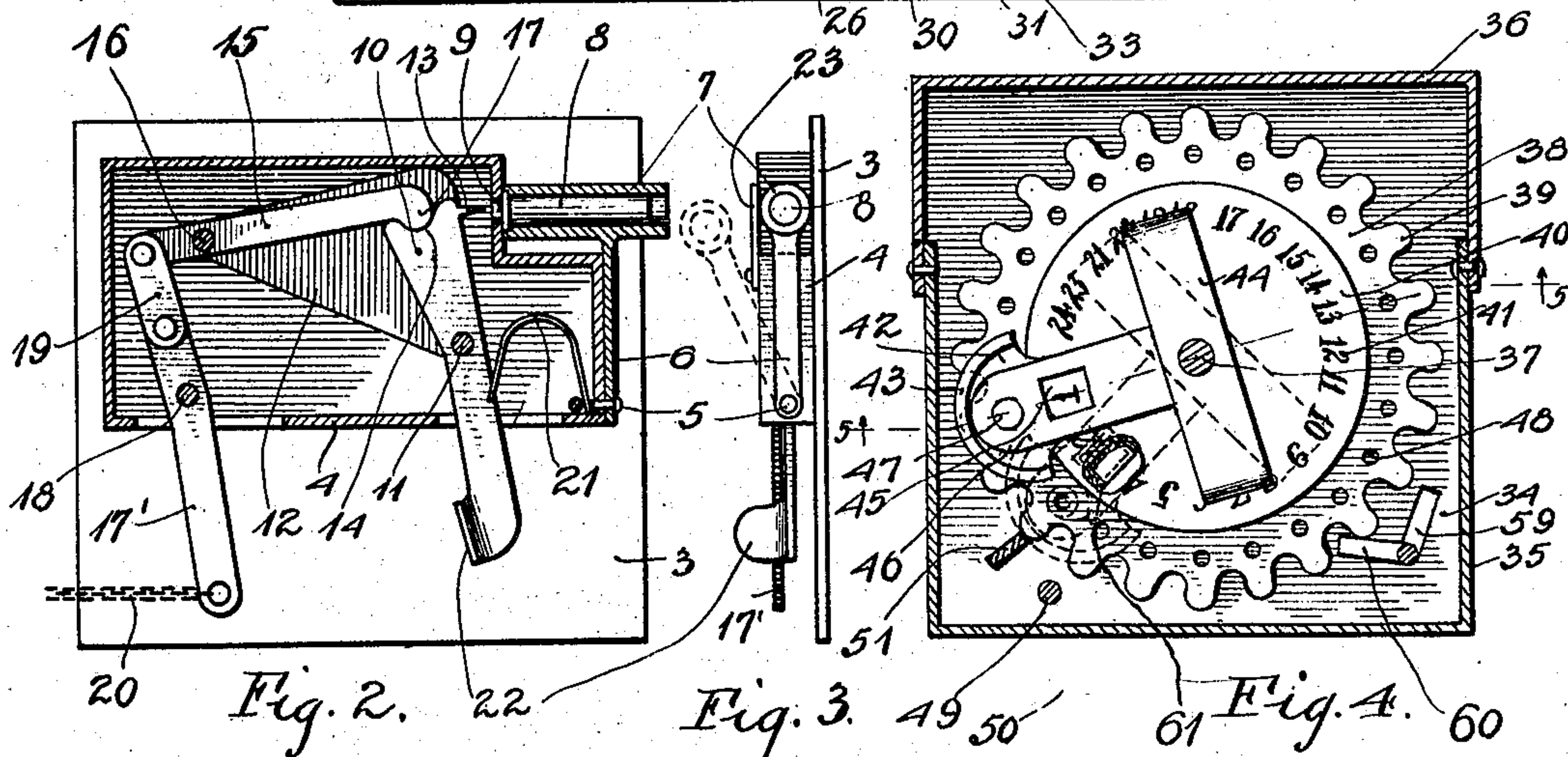
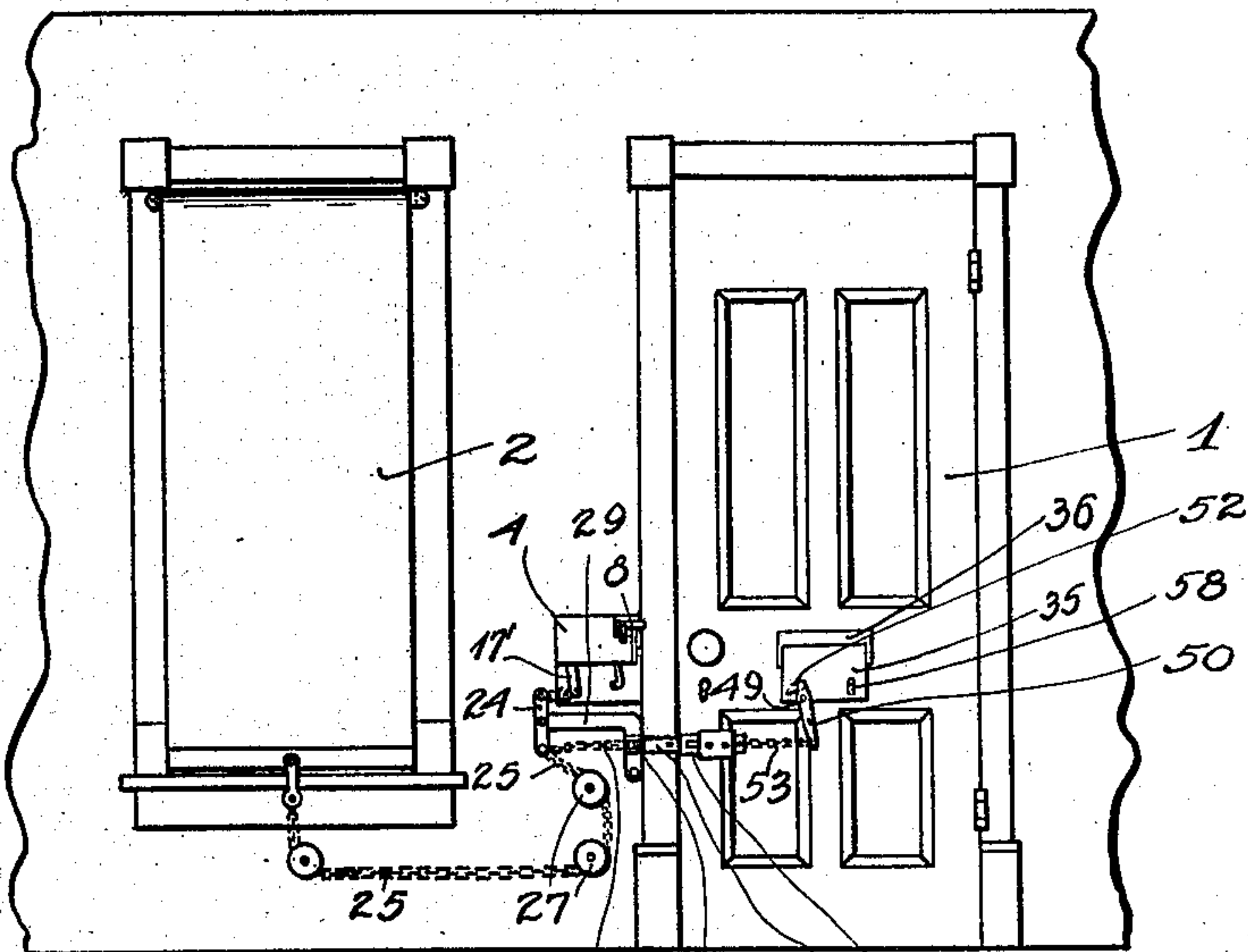


No. 894,440.

PATENTED JULY 28, 1908.

V. D. INCOGNITO.
BURGLAR ALARM.
APPLICATION FILED OCT. 5, 1907.

Fig. 1.



Witnesses.

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VITO D'INCOGNITO, OF CHICAGO, ILLINOIS.

BURGLAR-ALARM.

No. 894,440.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed October 5, 1907. Serial No. 396,526.

To all whom it may concern:

Be it known that I, VITO D'INCOGNITO, a subject of Victor Immanuel, King of Italy, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Burglar-Alarms, of which the following is a specification.

My invention relates to burglar alarms. Its object is to provide a burglar alarm which shall be economical in construction and effective in operation.

In the accompanying drawings, which illustrate my invention, Figure 1 is a diagrammatic view of my burglar alarm as applied to a window and a door; Fig. 2 is a longitudinal section of the alarm operating mechanism; Fig. 3 is a side view of the alarm operating mechanism from the right of Fig. 2; Fig. 4 is a longitudinal section of the alarm disengaging mechanism by which the alarm operating mechanism may be disconnected, if desired; Fig. 5 is a transverse section of the alarm disengaging mechanism taken on line 5, 5 of Fig. 4, and Fig. 6 is a detail view, showing the connection between the alarm operating mechanism and the disengaging mechanism.

In Fig. 1, I have shown the burglar alarm applied to a door 1 and a window curtain shade 2. The alarm operating mechanism is shown in detail in Figs. 2 and 3, and is mounted on a base 3. Secured to this base is a housing 4, to one side of which is pivoted at 5 the lower end 6 of a cartridge holding frame, which, at its upper end, has the pocket or barrel 7 for receiving a cartridge 8. In its normal position, the barrel rests against the supporting plate 3 so that the cartridge head will be opposite the trigger opening 9 through the side of the housing 4. Within the housing is the hammer 10 pivoted at 11 to a pivot block 12 secured to the base 3 within the housing. This hammer has the firing point 13 for exploding the cartridge, and has a locking groove 14 in its upper edge. A trip lever 15 is pivoted at 16 to the pivot block 12, and at its front end has the projection 17 for engaging in the locking groove 14 of the hammer. A trigger 17' is pivoted at 18 to the base 3, which trigger connects through link 19 with the trip lever 15, and is adapted for connection with a chain or cord 20 at its lower end. A spring 21 disposed between the wall of housing 4 and the hammer 10 tends to throw the upper end of the hammer toward the cartridge. The lower end of

the hammer has the thumb plate 22, by means of which the hammer may be rotated when the trigger is set. In order to prevent the hammer 10 from being thrown to fire the cartridge by the spring 21, the end of the trip lever 15 should be held firmly in the locking groove 14. It will be noticed that when the hammer is set the pivot 18 and the pivots connecting the link 19 with the trigger and with the trip lever are in a straight line, thus preventing rotation of the trip lever and holding its end firmly in the locking groove 14 of the hammer. When the trigger, however, is rotated, this straight line arrangement is broken and the spring 21 acting on the hammer will disengage this hammer from the trip lever, and will throw its upper end forwardly, so that the cartridge is fired. To reload, the cartridge supporting frame is rotated outwardly, as shown in Fig. 3, whereupon the fired cartridge may be removed and another one inserted.

A latch 23, pivoted to the housing, will engage over the cartridge frame, as shown in Fig. 3, to lock the cartridge frame in proper firing position. The chain or cord 20 is shown as connecting with one end of a pivot lever 24, whose other end connects with cords or chains 25 and 26, chain 25 leading about suitable pulleys 27, and connecting with the shade 2, while chain or cord 26 is shown as connected with the end of a ratchet plate 28 pivoted to a frame 29, shown as secured to the wall. This ratchet frame has ratchet teeth 30 adapted for engagement with a spring pawl 31 secured to a forked tripping bar 32, whose ends are pivoted concentrically with the ratchet plate 28, this construction being best shown in Fig. 6. Rotation, therefore, of the trip bar 32 will cause engagement of the spring pawl 31 with the ratchet teeth 30, which will cause rotation of the ratchet plate 28, whereupon chain or cord 26 will be pulled to rotate lever 24, and the trip lever 17 to thereby cause firing of the cartridge. As shown, the trip bar 32 is arranged to be rotated when the door is opened, and for this purpose a latch bar 33 is provided, carried by the door, and which when the door is opened will engage the trip bar 32 to cause rotation thereof and firing of the cartridge, to cause an alarm. It may be desired, however, to disconnect the alarm and to set it only at certain times, or to enable a person who has a right to enter to do so without setting off the alarm. This

is accomplished by the disengaging mechanism shown in detail in Figs. 4 and 5. This disengaging mechanism is mounted on a supporting plate 34, engaged by the inclosing housing 35, whose upper part 36 is hinged to give access to the inclosed parts for purposes of setting, adjustment etc. Pivoted to the pivot post 37 is a disk 38 having teeth 39, about its circumference. Secured to the disk and concentric therewith is a disk 40 having characters or numbers 41 about its edge, and the disk 38 on its outer face is also provided with similar characters. Also pivoted to the post 37 is an arm 42, having at its end the circular flange 43 forming a cam. The disk and cam arm are held in position against the supporting plate 34 by means of a spring frame or bridge 44 engaging about the pivot post between the arm 42 and the top of the inclosing housing, as shown in Fig. 5. The arm 42 also has the opening 45 for registering with the various characters on the dial when this arm is turned around. A spring plate 46 is clamped at one end to the pivot end of the arm, and its other end carries a pin 47, which passes through the arm and which may engage in any one of the holes 48 in the disk 38, so that the arm 42 may be locked in any position with reference to the disk. The opening 45 also extends through the spring 46. Pivoted at 49 to the top of the housing, as best shown in Fig. 1, is the disconnecting lever 50 whose end 51 bends downwardly and passes through a slot 52 cut in the housing top. The lower end of this lever connects through chain or cord 53 with the latch plate 33. This latch plate, as best shown in Fig. 6, is within a housing 54 secured to a base 55 by rivets 56. A spring 57 within the housing abuts against the right rivet 56 and the latch plate, so that the latch plate has a tendency to project outwardly beyond the edge of the door, to engage with the tripping bar 32. When the disconnecting lever 50, however, is rotated, this latch plate will be pulled to the right to be within the edge of the door, so that the door can be opened without causing rotation of tripping bar 32. The end 51 of the disconnecting lever, when the burglar alarm is set, is disposed in the path of the cam head 43, and therefore, when the cam head is rotated, it will engage the end 51 and will rotate the disconnecting lever to cause disconnection of the latch plate from the tripping bar 32. A keyhole 58 is provided through the top of the housing 35, and a keyhole 59 is provided through the supporting plate 34 and through the door, so that a key 60 can be inserted from the inside or outside of the door, which key, when rotated, will engage with the teeth 39 on the disk 38 and will rotate said disk and the cam arm 42 connected therewith. Thus, if a person desires to enter without causing the alarm to oper-

ate, he inserts his key and turns it. Through the supporting plate 34 and the door there is a sight opening 61, which is in such position that when a certain number appears there-through, the cam arm will be in position to turn the disconnecting arm to release the latch plate. Thus, if the combination is set for number 1, as shown in Fig. 4, as soon as the character 1 can be seen through the sight opening 61, the cam head 43 will have rotated the disconnecting arm and will be in the position as shown in dotted lines in Fig. 4. The key can be turned in either direction, and as soon as the combination number appears, it will be an indication that the alarm mechanism is disconnected and that the door can then be safely opened without causing the actuation of the alarm. Thus, a person who is provided with a key and knows the combination, can safely open the door without setting off the alarm, but when an attempt is made to open the door without first actuating the disconnecting mechanism, the cartridge will be fired and the alarm sounded.

My alarm may of course be applied in other ways than those shown, and my invention may be embodied in mechanisms of different construction without departing from the spirit of my invention.

I desire to secure the following claims by Letters Patent:

1. In a burglar alarm, the combination of alarm producing mechanism, tripping mechanism for operating said alarm producing mechanism upon opening of a closure to be protected, lever mechanism connecting with the tripping mechanism, a rotatable arm or lug, and means for rotating said arm or lug to a position to cause engagement thereof with the lever mechanism, whereby said lever mechanism is actuated to disconnect the tripping mechanism from the alarm producing mechanism to prevent actuation of the alarm producing mechanism upon opening of the closure.

2. In a burglar alarm, the combination of alarm producing means, tripping mechanism associated with the closure to be protected and adapted normally upon opening of the closure to set off the alarm producing mechanism, and means for preventing operation of the tripping mechanism upon opening of the closure, said means comprising a rotatable lug and lever mechanism engaged by the lug upon travel thereof and actuated thereby to render the tripping mechanism inoperative.

3. In a burglar alarm, the combination of alarm producing mechanism, tripping mechanism associated with the closure to be protected and adapted upon actuation to set off the alarm producing mechanism, a rotatable lug operable from the outside of the closure, lever mechanism in the path of the lug and

connected with the tripping mechanism, rotation of said lug causing engagement thereof with the lever mechanism to cause the tripping mechanism to be rendered inoperative and to allow opening of the closure without setting off the alarm mechanism.

4. In a burglar alarm system, the combination of the closure to be protected, alarm producing mechanism, tripping mechanism associated with the closure and adapted upon actuation to cause setting off of the alarm producing mechanism, a lever connected with the tripping mechanism, a rotatable disk, a key hole in the closure through which a key may be inserted for engagement with the disk to cause rotation thereof, an actuating member adapted for adjustable connection with the disk to rotate therewith, said lever being in the path of said actuating member to be actuated thereby upon turning of the disk to cause the tripping mechanism to be rendered inoperative so that the closure may be opened without causing setting off of the alarm producing mechanism.

5. In a burglar alarm system, the combination of a closure to be protected, alarm producing mechanism, tripping mechanism comprising an actuating bar normally connected with the alarm producing mechanism to produce actuation thereof upon opening of the closure, lever mechanism connected with the actuating bar, and a rotatable lug operable from the outside of the closure for actuating the lever mechanism to disconnect the actuating bar from the alarm producing mechanism to prevent sounding of an alarm upon opening of the closure.

6. In a burglar alarm system, the combination of a door or similar member, alarm producing mechanism, an actuating member disposed adjacent the door and connected with the alarm producing mechanism, a reciprocable tripping bar carried by the door and normally disposed with reference to the actuating member so that opening of the

door will cause the actuating member to be engaged by the tripping bar to cause operation of the alarm producing mechanism, lever mechanism mounted on the inside of the door and connected with the tripping bar, a rotatable lug on the inside of the door, means accessible from the outside of the door for causing the rotation of said lug and engagement thereof with the lever mechanism to cause the lever mechanism to withdraw the bar from its normal position so that the door may be opened without causing movement of the actuating member and operation of the alarm mechanism.

7. In a burglar alarm system, the combination of the closure to be protected, alarm producing mechanism, tripping mechanism normally in engagement and connected with the alarm producing mechanism so that opening of the closure will cause actuation of the alarm producing mechanism, lever mechanism connected with the tripping mechanism, a rotatable disk and rotatable arm mounted concentric with said disk, means for securing said arm to the disk in various relative positions, there being an opening from the outside of the closure to the disk so that an implement may be inserted to cause rotation of the disk and the arm carried thereby, means whereby the relative position of arm and disk may be determined from the outside of the closure, said lever mechanism being in the path of the rotatable arm to be actuated thereby to render the tripping mechanism ineffective so that the closure may be opened without actuating the alarm producing mechanism.

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

VITO D'INCOGNITO.

Witnesses:

THOMAS J. YOUNG,
R. B. MALECEK.