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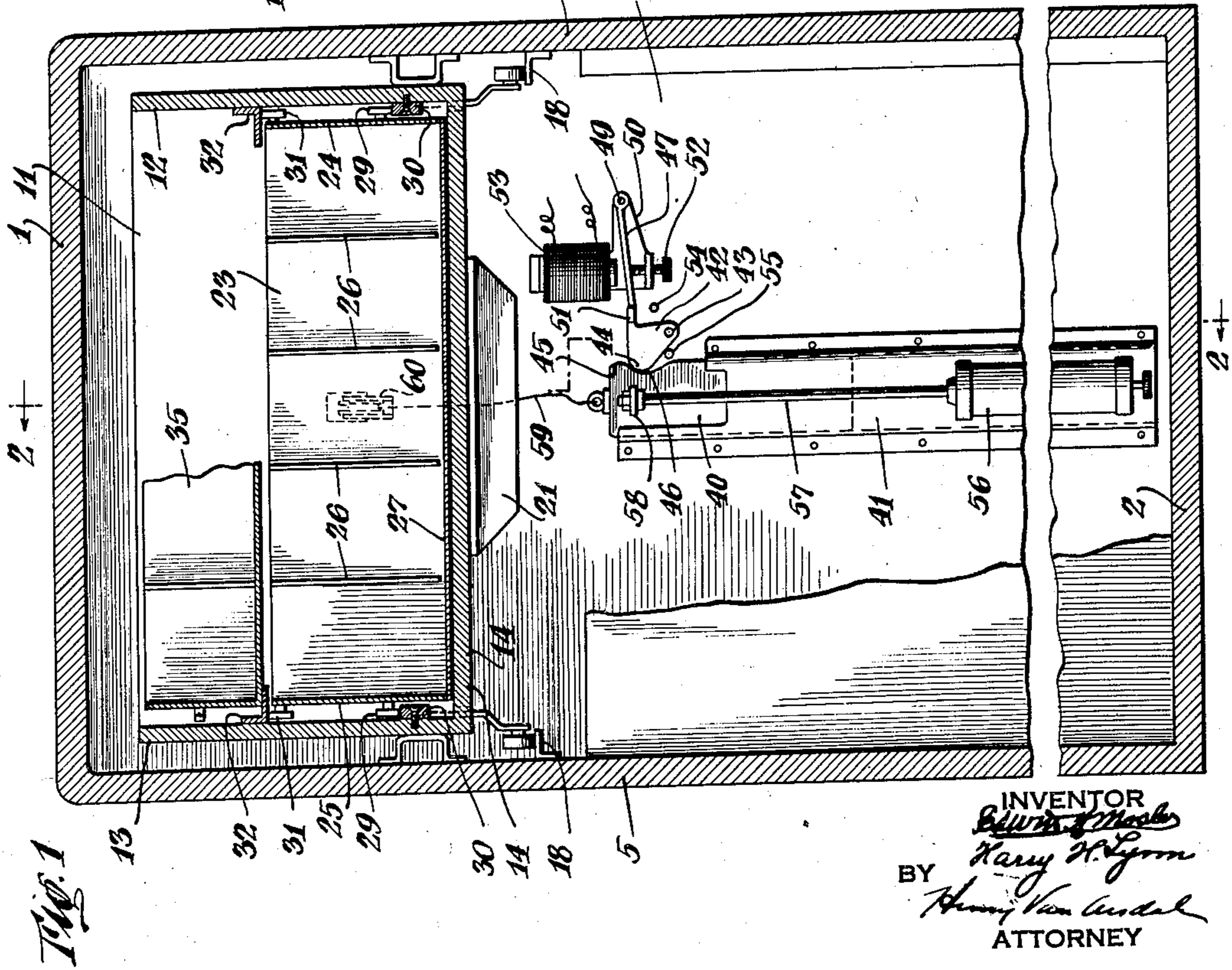
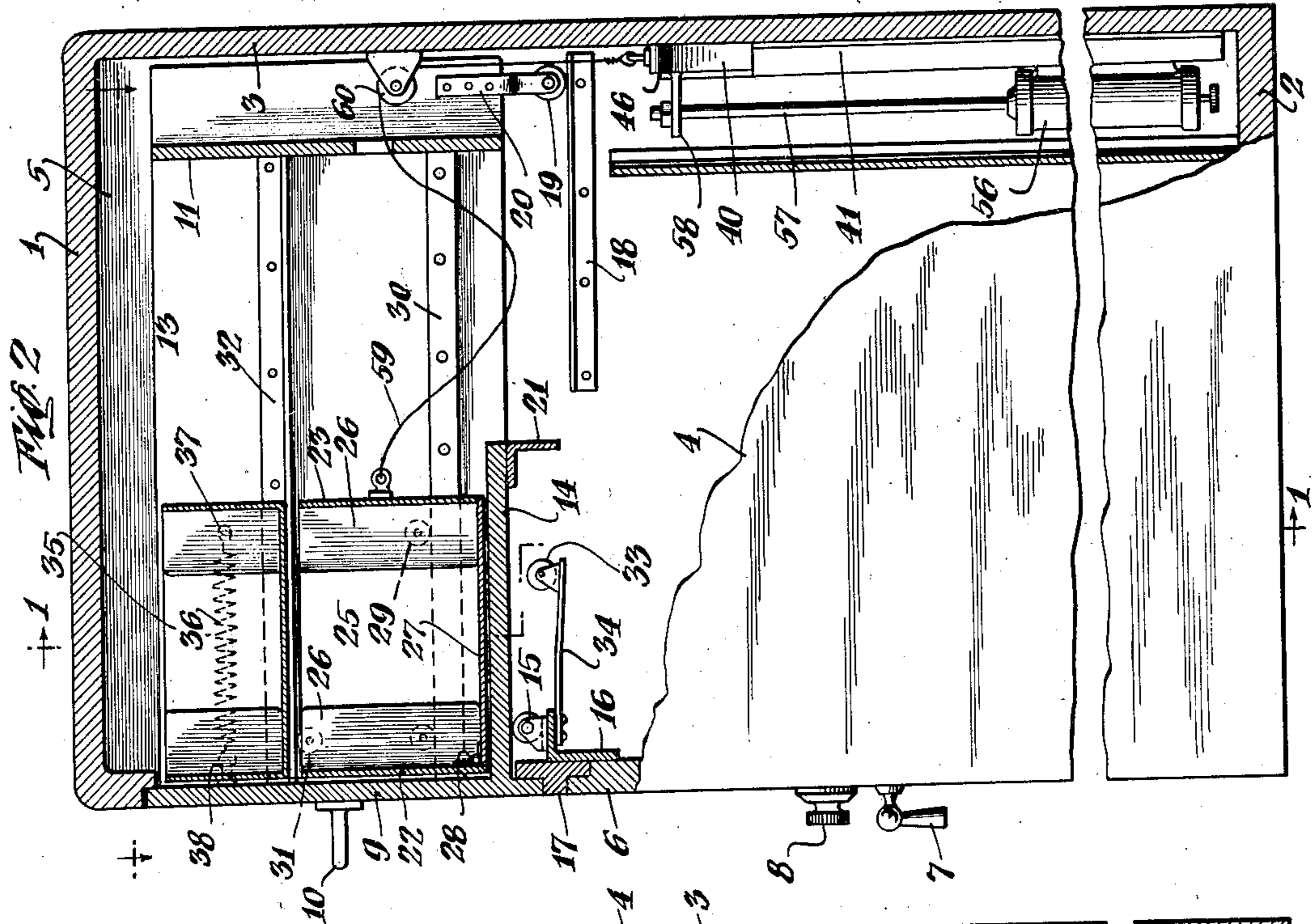
E. H. MOSLER ET AL

2,022,381

ANTIROBBERY RECEPTACLE

Filed Dec. 21, 1934

3 Sheets-Sheet 1



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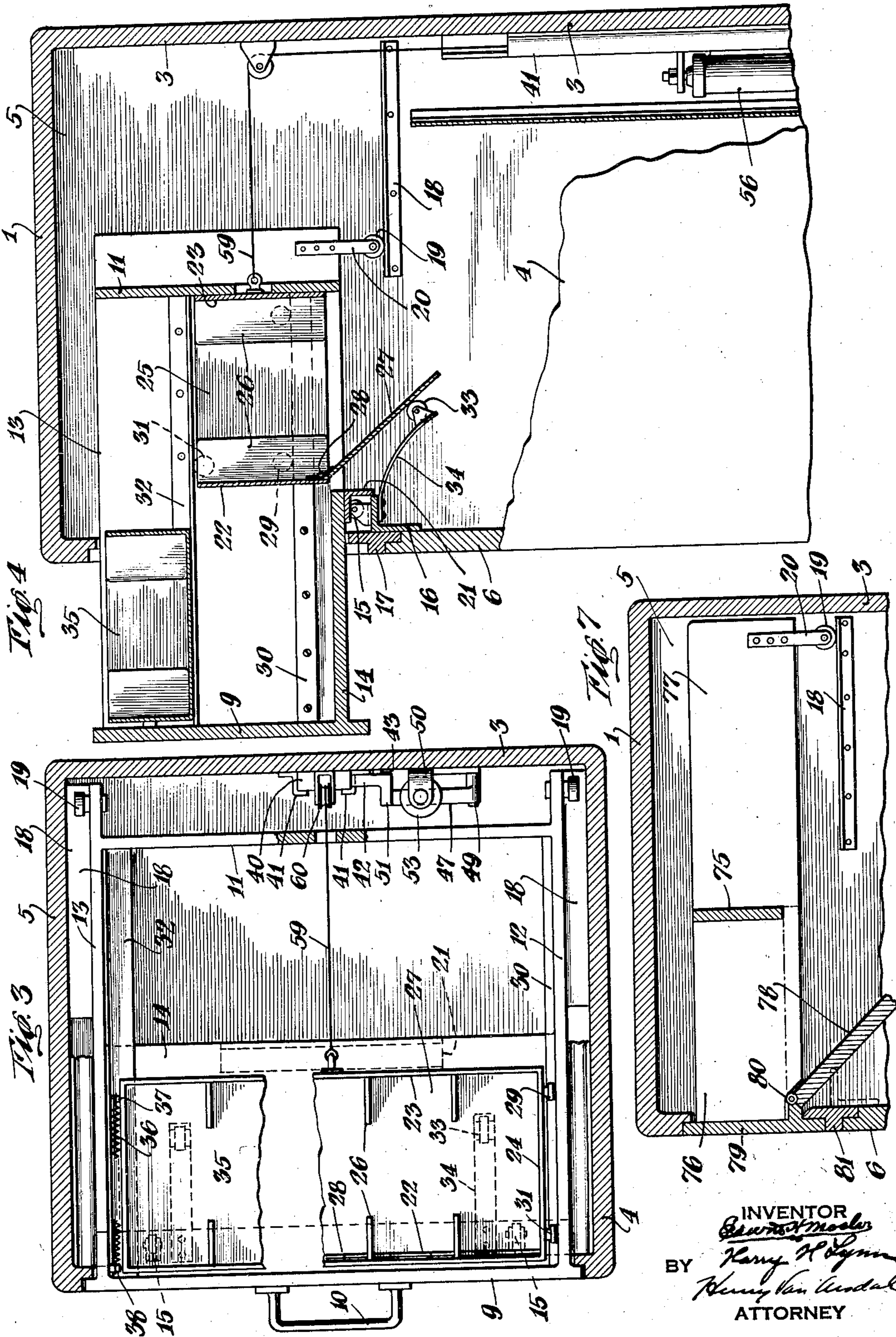
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3 Sheets-Sheet 2



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3 Sheets-Sheet 3

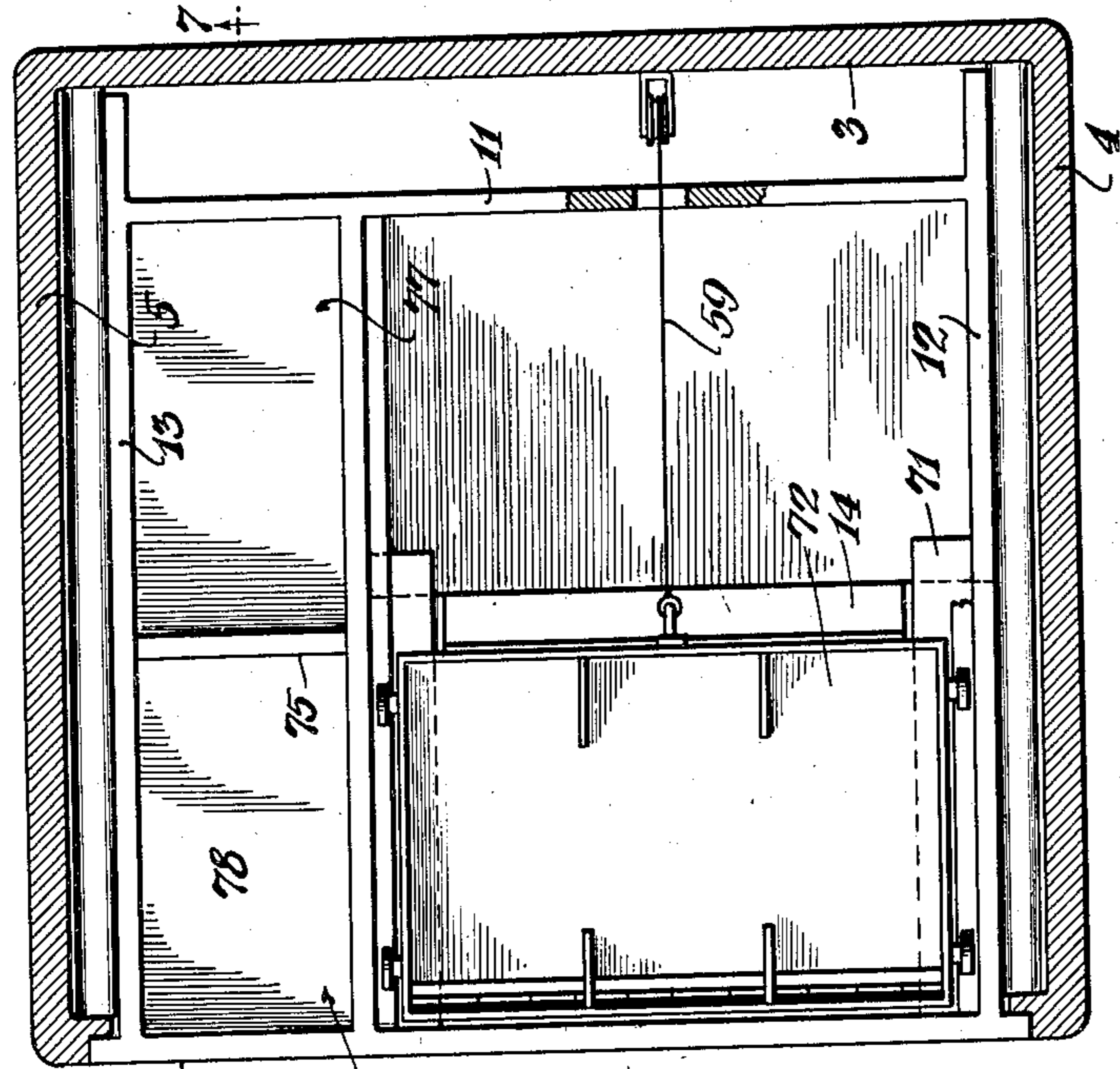


Fig. 6

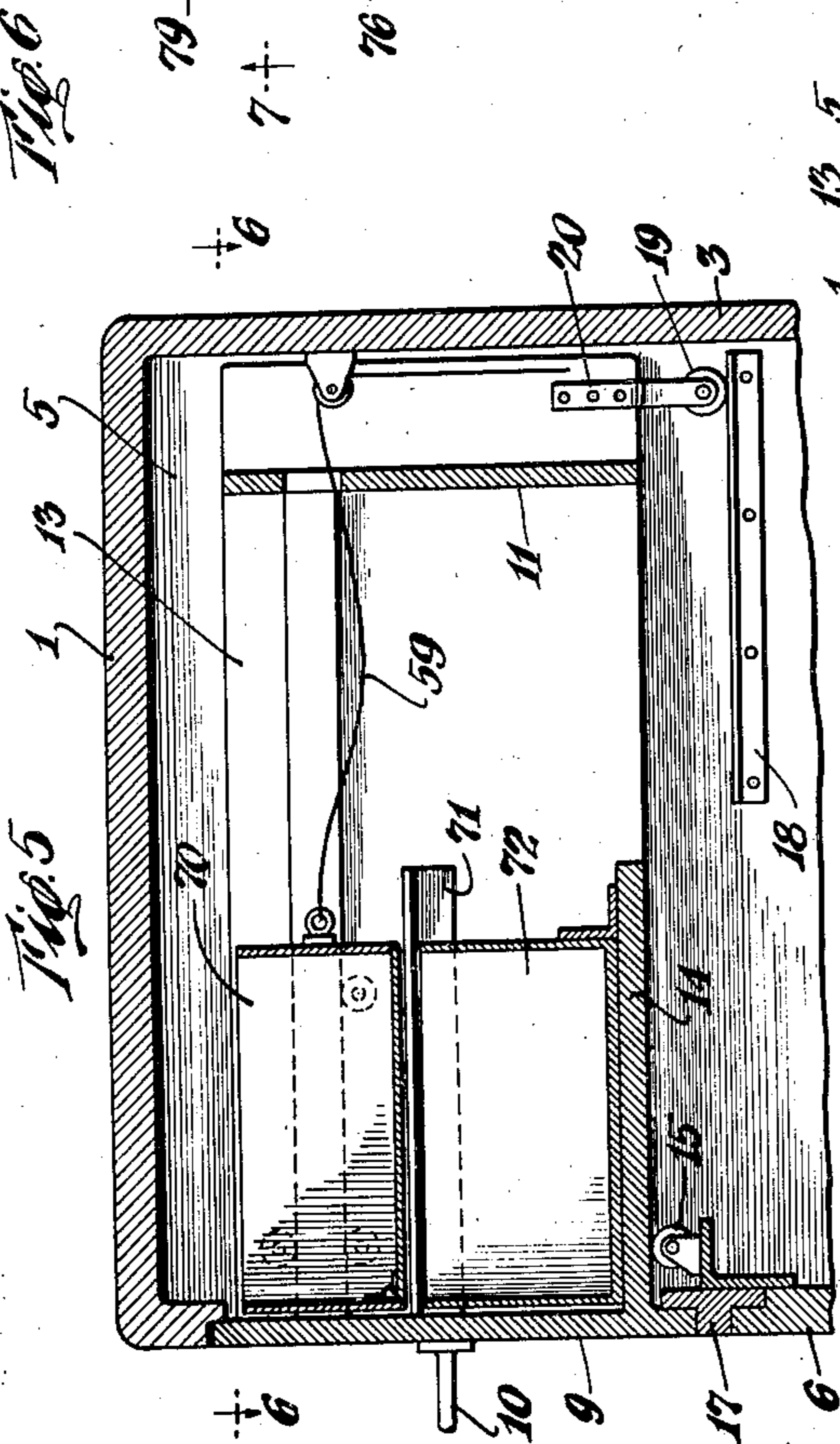


Fig. 5

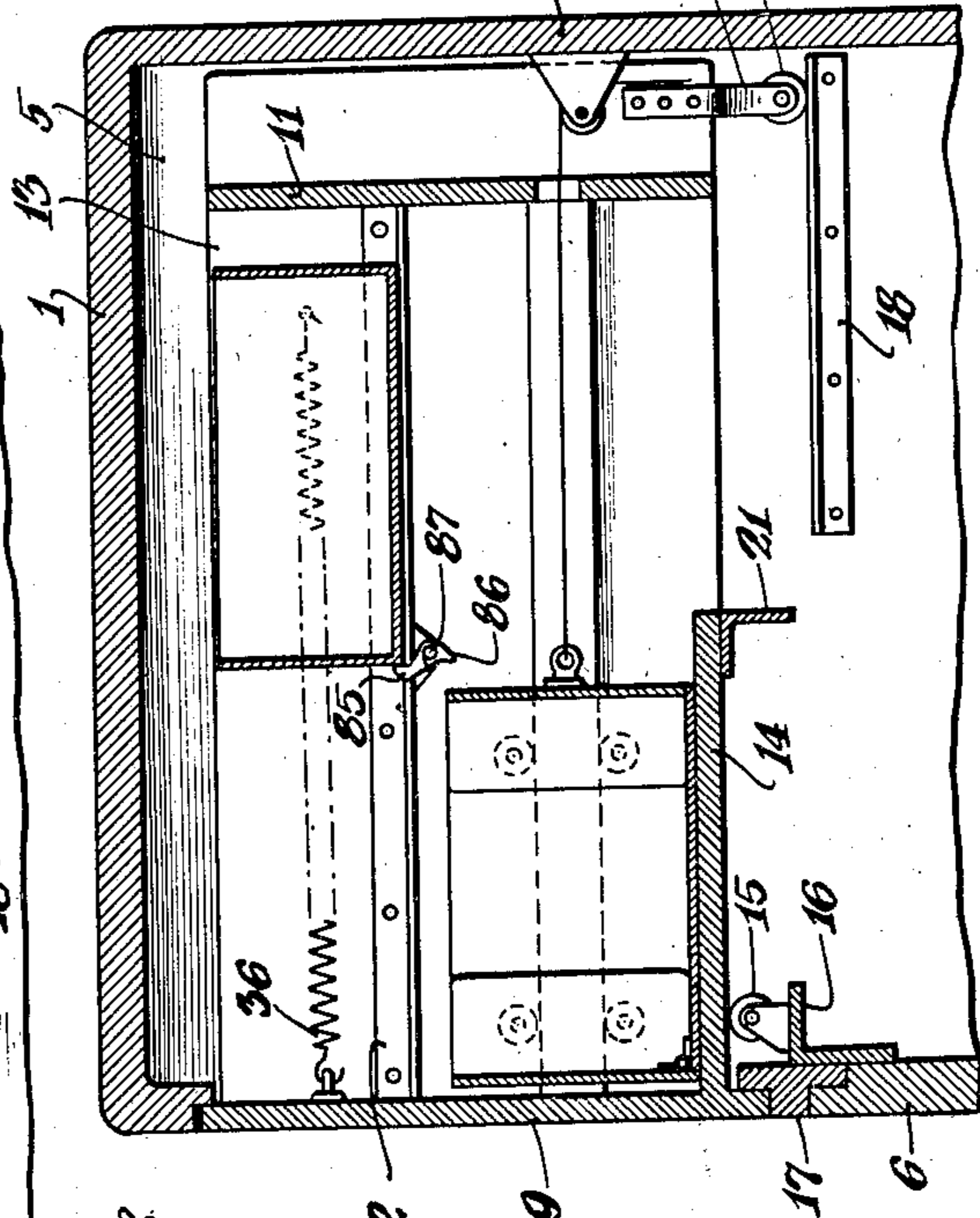


Fig. 8

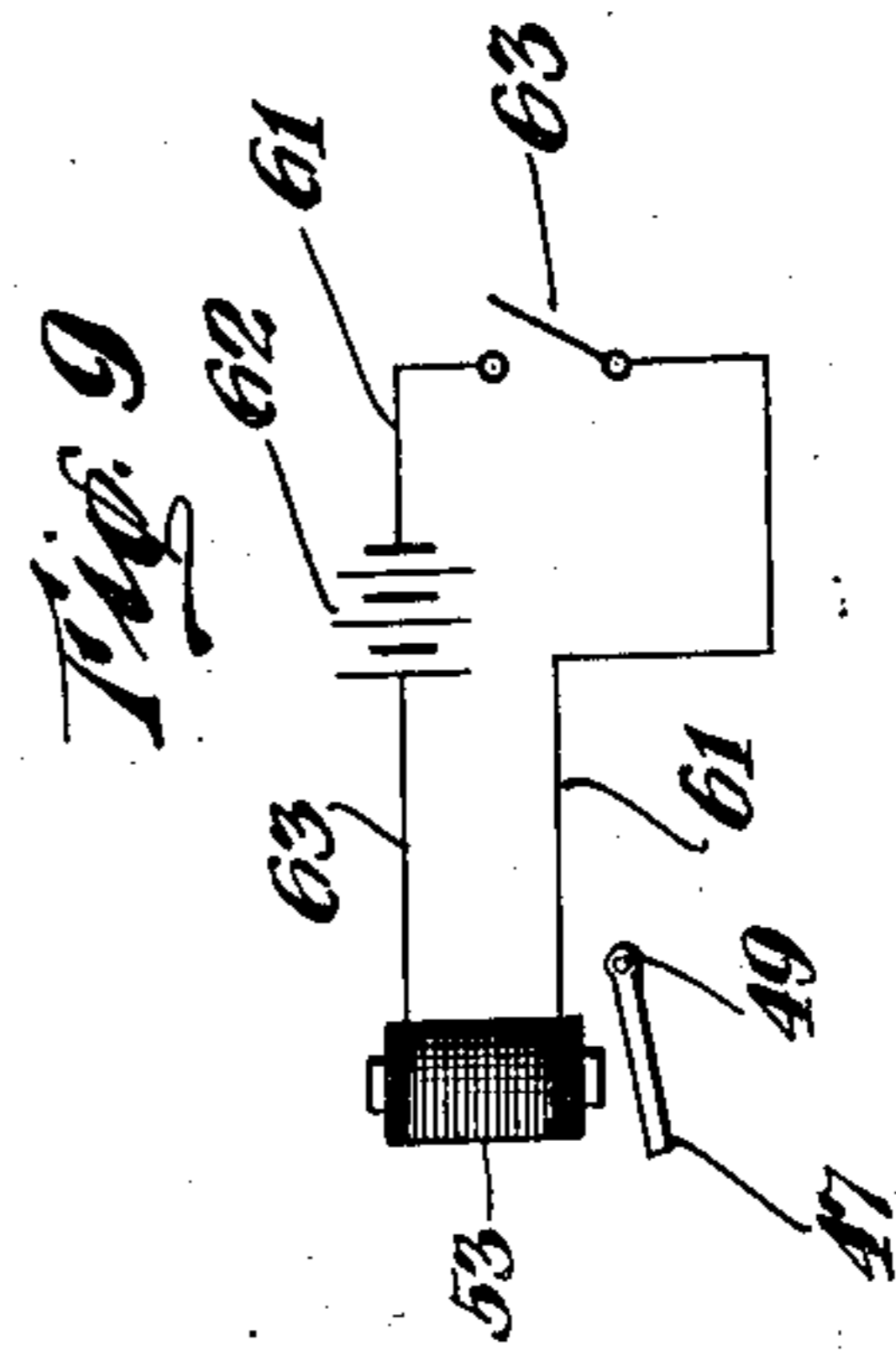


Fig. 9

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2,022,381

ANTIROBBERY RECEPTACLE

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9 Claims. (Cl. 109—1)

This invention relates to an anti-robbery receptacle, and more particularly relates to tills and cash drawers for banks, stores or other environments, and is also applicable to receptacles for other purposes, such as trays or counters adapted to hold precious or valuable goods on display, and drawers adapted to contain goods for sale, and the like.

The principal object of this invention is to provide a receptacle adapted to a use such as has been referred to, normally holding the money or goods readily accessible for handling, and operating under the direction of a person at a near or remote point to transfer the money or the goods instantly into a safe compartment or chest where they are not readily accessible to an unauthorized person, so that whenever it appears that, as in the case of a hold up, the money or goods are in danger of being seized by the robber, or the attendant is about to be compelled to turn over the money or goods to the robber, the receptacle may be operated to frustrate the attempted robbery.

Another object of this invention is to provide an anti-robbery receptacle of the character described which normally gives full and free access to the money or goods in the till or drawer for money changing or handling, and which, when directed, operates promptly, positively and effectively to safeguard the goods, and having a construction and operating means which are simple, effective and durable, and not apt to get out of order or fail to operate to safeguard the contents.

A further object of this invention, as a possible modification, is to provide an anti-robbery receptacle of the character described, and one in which the transfer of the money or goods to the safe compartment or chest is made without the robber being made aware that the transfer is made, thus tending to save the attendant from the harm the robber might be likely to inflict on him should the robber sense that the money or goods have been rendered inaccessible contrary to his orders.

Other objects of this invention will be in part obvious and in part pointed out hereinafter.

In accordance with this invention, the money or goods, or one or more racks, boxes or other containers housing the money or goods, rest on a member pivoted on a horizontal axis and shiftable on or in the receptacle into a certain position in which the pivoted member swings downwardly to dump the money or goods, and their containers, if any, through an opening into the interior of a safe or chest with which the open-

ing communicates; there being means provided for preventing dumping movement of the pivoted member except when the pivoted member has been shifted to the predetermined dumping location; and means are provided which can be set in motion by persons at near or remote points, or both, to shift the pivoted member to its dumping location in or on the receptacle, so that should danger threaten, the money or goods can be safeguarded instantly.

The pivoted member may be the bottom of a tray, or the like, slidable in a drawer of a bank counter, store counter, or other equipment, the drawer having an opening through its bottom or back, or may be a display tray shiftable on a store counter, or the like, having an opening into a safe compartment, or may take any desired form shiftable associated with any suitable environment so as to be disposable in a certain location to dump the articles to be protected into the interior of a safe guarding structure.

Other aspects of the invention will appear as the description proceeds.

In order that a clearer understanding of this invention may be had, attention is hereby directed to the accompanying drawings, forming a part of this application, and illustrating certain possible embodiments of this invention, and in which:

Figure 1 is a vertical sectional view of a receptacle embodying this invention, viewed toward the rear, as indicated by the line 1—1 of Figure 2, certain parts being shown broken away;

Figure 2 is a vertical sectional view of the same, and is taken on the line 2—2 of Figure 1;

Figure 3 is a horizontal sectional view of the same, and is taken on the line 3—3 of Figure 2;

Figure 4 is a view similar to Figure 2, showing the dumping position with the drawer open;

Figure 5 is a vertical sectional view of a modified arrangement within the drawer of the receptacle;

Figure 6 is a horizontal sectional view of the same, and is taken on the line 6—6 of Figure 5;

Figure 7 is a vertical sectional view of the same, and is taken on the line 7—7 of Figure 6;

Figure 8 is a vertical sectional view of another modified arrangement within the drawer of the receptacle; and

Figure 9 is a wiring diagram of the control means.

Similar reference characters refer to similar parts throughout the several views of the drawings.

Referring to the drawings, and in which, for

purposes of illustration, the invention is shown applied to a till suitable for use by a bank teller or by a cashier in a store or other establishment, the receptacle includes a fully enclosed cabinet having top wall 1, bottom wall 2, rear wall 3, and side walls 4 and 5. The lower portion of the cabinet forms a safe storage compartment provided with a sturdy door 6 at the front, preferably provided with a safe lock of which the handle 7 and combination dial 8 are shown. In the upper part of the cabinet is housed a sliding drawer having a front wall 9 at the front of the cabinet and having a handle 10, a rear wall 11, side walls 12 and 13, and a bottom wall 14 which, however, extends only part way back from the front wall 9, leaving a space or opening between it and the rear wall 11 into the safe storage compartment in the lower part of the cabinet.

The drawer is slidably supported in the receptacle by means of rollers 15, mounted on an angle iron 16 secured to the cross strip 17 at the front of the cabinet and engaging the drawer bottom 14, and by runner strips 18 which are secured to the opposite side walls of the cabinet and are engaged by rollers 19 carried by brackets 20 secured to the side walls of the drawer near their rear ends.

The opening in the bottom of the drawer is confined within the cabinet by means of a central angle strip 21 which is secured to the drawer bottom 14 and is adapted to engage the angle strip 16 when the drawer has been pulled out a certain distance.

Slidably disposed in the drawer is a money rack or tray having front wall 22, rear wall 23, side walls 24 and 25, partitions 26 dividing the tray into compartments for convenience in keeping separate bills of different denominations, and a bottom 27 which is hinged, as at 28, to the front wall 22 to swing downwardly on a horizontal axis, and on which the money or other articles in the tray rest. The side walls of the tray are provided with rollers 29 which run on runner strips 30 secured to the side walls of the drawer, and also have guiding rollers 31 at their top edges, which engage upwardly against angle strips 32 secured to the side walls of the drawer.

Normally, the tray is against the front 9 of the drawer so that when the drawer is open the contents of the tray are readily accessible to the teller or cashier. When, however, the tray is moved rearwardly in the drawer against the rear wall of the drawer, the bottom 27 of the tray aligns with the opening in the bottom of the drawer and the bottom of the tray swings down and dumps the contents of the tray into the safe storage compartment of the cabinet. When the tray bottom 27 swings down it bears on rollers 33 carried on spring arms 34 secured to the angle strip 16. One of the principal purposes of the roller mounting of the tray and the shock absorbing roller 33 and spring 34 is to eliminate the noise incident to the movement and dumping of the tray to such an extent that this operation will not be audible to a person standing in the vicinity.

To conceal the rearward movement of the tray when the drawer is open, an auxiliary tray, generally indicated at 35, may be slidably supported on the angle pieces 32 and normally held in masking position over the main tray by means of light springs 36 secured at one end to a side wall of the tray as at 37 and to the front of the drawer as at 38, these springs, however, being sufficiently light so that the teller or cashier may

easily and with little effort push and hold the auxiliary tray back to uncover and give him free access to the contents of the main tray. It is suggested that only a few bills be kept in the auxiliary tray with the intention of giving the impression that the entire amount of available cash is in sight. Thus the auxiliary tray conceals movement of the main tray rearwardly in the drawer into dumping position therein.

Various means may be provided for moving the main tray into dumping position in the drawer. As shown, such means may comprise a weight 40 mounted in a vertical slideway 41 and normally held in elevated position by means of a detent 42 pivotally secured by a pin or screw 43 to the rear wall of the cabinet and having a nose 44 adapted to engage under a shoulder 45 formed by a groove or recess 46 in one side of the weight 40. The detent 42 is balanced to fall by gravity into this groove, and the engaging surfaces of the detent and weight are so inclined that the weight will normally swing the detent aside and pass by. The nose of the detent, however, is normally locked in restraining engagement with the weight by means of a metallic finger 47 which is pivoted at one end on a pin 49 carried on a bracket 50, secured to the rear wall of the cabinet, and at its opposite end abuts against an ear 51 on the detent 42. Finger 47 normally falls by gravity on a set screw 52 mounted on bracket 50 and so adjusted that the end of finger 47 will align in proper position behind the detent ear 51.

Finger 47 is the armature of an electro-magnet 53 disposed above the finger and adapted when energized to raise the finger out of engagement with the detent ear 51, thus causing the weight 40 to drop down the slideway 41. Suitable stop pins 54 and 55 are secured to the rear wall of the cabinet to hold movement of the detent 42 within proper bounds.

To aid in eliminating noise, a suitable check, comprising cylinder 56 and rod 57 connected to an arm 58 attached to the weight 40, may be provided.

Weight 40 is attached to the main tray by means of a flexible chain or cable 59 running through a pulley 60 secured to the wall of the cabinet, so that when the drawer is open the main tray will be drawn backward in the drawer and will be dumped immediately following the energizing of the magnet 53. This magnet may be connected by suitable conductors 61 in series with a source of current 62 and one or more switches 63 placed at any desired points, either near to or remote from the receptacle, and whereby the magnet is energized upon the closing of any one of the switches.

After the weight has fallen, it may be restored to and latched in elevated position by pulling the main tray forward against the front of the drawer when the drawer is open, and closing one of the switches 63 temporarily to allow the weight to be moved into engagement with the detent, and opening the switch 63 to lock the detent in weight engaging position.

As a modification, the dumping tray 70 may be slidably supported in the upper part of the drawer, the tray bottom engaging angle strips 71 on the drawer. The weight 40 may be connected by its cable 59 to this tray. A tray or box 72 may be supported on the bottom 14 of the drawer.

Also, instead of having the trays extend the full width of the drawer, they may take up only a part of the width of the drawer, as shown in

Figure 6, and other compartments may be arranged alongside of the trays. For instance, as shown in Figures 6 and 7, the drawer may be partitioned off as by a central partition 75 to divide this part of the drawer into a forward compartment 76 and a rear compartment 77. The bottom 78 of the compartment 76 may be hinged to the front wall 79 of the drawer, as at 80, so that when the drawer is closed the bottom 78 inclines downwardly and all the contents of this compartment is delivered into the safe storage compartment. When the drawer is opened the cross piece 81 at the front of the cabinet causes the bottom 78 of compartment 76 to assume a horizontal position so that money or other articles can be received in the compartment 76. As soon as the drawer is closed these articles are automatically dumped into the safe storage compartment. The advantage of this is that whenever the teller wishes to deposit anything in the safe storage compartment he needs merely to open the drawer and place the article in compartment 76 and then close the drawer, which automatically deposits the article in the safe storage compartment and the teller is not required to unlock and open the safe storage compartment for this purpose.

As a modification to the construction illustrated in Figures 1 to 4, inclusive, a latch 85 may be secured to one or both of the side angle strips 32 to latch the upper or auxiliary tray in rearward position in the drawer so as to expose the contents of the main tray for handling without requiring the teller or cashier to hold the auxiliary tray back manually. These latches 85 may be provided with tails 86 adapted to be engaged by the main tray when it is retracted in the drawer to release the auxiliary tray and have it brought into forward position in the drawer by the springs 36. These latches 85 may also, if desired, be mounted on a shaft 87, which may be turned from outside of the cabinet to retract the latches and cause the auxiliary tray to move into forward position in the drawer.

From the above it will be apparent that the invention is adapted to many different modifications, different environments, and different structural arrangements and combinations without departing from the scope of the invention and, therefore, it is to be understood that all matter contained in the foregoing description or illustrated in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

What we claim is:

1. An anti-robbery receptacle of the character described, including in combination, a cabinet having a lower safe storage compartment, a drawer slidably mounted in said cabinet above said compartment, a container for money or other articles shiftably housed in said drawer and having a bottom movable to dump the contents of the container, the bottom of said drawer having an opening adapted to pass the contents of the container, when dumped, into the safe storage compartment, and means holding the bottom of the container in article supporting position, said container being shiftable as a whole in said drawer to disengage the container bottom from said holding means and dump the contents of the container through said opening in the bottom of the drawer into the safe storage compartment.

2. An anti-robbery receptacle of the character described, including, in combination, a cabinet having a lower safe storage compartment, a

drawer slidably mounted in said cabinet above said compartment, a container for money or other articles shiftably housed in said drawer and having a bottom movable to dump the contents of the container, the bottom of said drawer having an opening adapted to pass the contents dumping out of the container into the safe storage compartment, means holding the bottom of the container in contents supporting position, and operating means for shifting the container in the drawer to disengage the container bottom from said holding means and dump the contents of the container through said opening in the bottom of the drawer into the safe storage compartment.

3. An anti-robbery receptacle of the character described, including, in combination, a cabinet having a lower safe storage compartment, a drawer slidably mounted in said cabinet above said compartment, a container for money or other articles shiftably housed in said drawer and having a bottom movable to dump the contents of the container, the bottom of said drawer having an opening adapted to pass the contents dumping out of the container into the safe storage compartment, means holding the bottom of the container in contents supporting position, and operating means for shifting the container in the drawer to disengage the container bottom from said holding means and dump the contents of the container through said opening in the bottom of the drawer into the safe storage compartment, said means including a pendant weight operatively connected to said container, a detent normally holding the weight elevated, and means operable to vitiate the detent to free the weight to pull the container into dumping position in the drawer, and a silencing and check device operatively connected to said weight to silence and check the fall of the weight and the accompanying movement of the container in the drawer.

4. An anti-robbery receptacle of the character described, including, in combination, a cabinet having a lower safe storage compartment, a drawer slidably mounted in said cabinet above said compartment, a container for money or other articles shiftably housed in said drawer and having a bottom movable to dump the contents of the container, the bottom of said drawer having an opening adapted to pass the contents dumping out of the container into the safe storage compartment, means holding the bottom of the container in contents supporting position, operating means for shifting the container in the drawer to disengage the container bottom from said holding means and dump the contents of the container through said opening in the bottom of the drawer into the safe storage compartment, detent means normally preventing operating of said operating means, electro-magnetic means adapted to be operated to vitiate said detent means to free the operating means to move the container to dumping position in the drawer, and control means for controlling operating of said electro-magnetic means.

5. An anti-robbery receptacle of the character described, including in combination, a cabinet having a lower safe storage compartment, a drawer slidably mounted in said cabinet above said compartment, a container for money or other articles shiftably housed in said drawer and having a bottom movable to dump the contents of the container, the bottom of said drawer having an opening adapted to pass the contents of the container, when dumped, into the safe storage compartment, and means holding the bottom of

the container in article supporting position, said container being shiftable in said drawer to disengage the container bottom from said holding means and dump the contents of the container through said opening in the bottom of the drawer into the safe storage compartment, and a second container for money or other articles housed in said drawer.

6. An anti-robbery receptacle of the character described, including in combination, a cabinet having a lower safe storage compartment, a drawer slidably mounted in said cabinet above said compartment, a container for money or other articles shiftable housed in said drawer and having a bottom movable to dump the contents of the container, the bottom of said drawer having an opening adapted to pass the contents of the container, when dumped, into the safe storage compartment, means holding the bottom of the container in article supporting position, said container being shiftable in said drawer to disengage the container bottom from said holding means and dump the contents of the container through said opening in the bottom of the drawer into the safe storage compartment, a second container for money or other articles housed in said drawer above and masking the other container and shiftable relatively thereto to uncover said other container, means for moving said second container to said masking position, and means for releasably latching said second container in unmasking position relative to the other container and adapted to be engaged and operated by said other container when moved rearwardly in the drawer to free said second container for movement in the drawer.

7. An anti-robbery receptacle of the character described, including in combination, a cabinet having a lower safe storage compartment, a drawer slidably mounted in said cabinet above said compartment, a container for money or other articles shiftable housed in said drawer and having a bottom movable to dump the contents of the container, the bottom of said drawer having an opening adapted to pass the contents of

the container, when dumped, into the safe storage compartment, means holding the bottom of the container in article supporting position, said container being shiftable in said drawer to disengage the container bottom from said holding means and dump the contents of the container through said opening in the bottom of the drawer into the safe storage compartment, a second container for money or other articles housed in said drawer, said second container having a pivoted bottom, and means on the cabinet holding the said pivoted bottom in article retaining position when the drawer is out of fully closed position, said pivoted bottom falling when the drawer is fully closed to dump the contents of said second container into the safe storage compartment.

8. In a receptacle of the character described and having a housing compartment for a dump conveyor for money or other articles and a communicating safe storage compartment, a dump conveyor shiftable confined in said housing compartment and adapted to be shifted to a predetermined location in said housing compartment to dump money or other articles therefrom into said communicating safe storage compartment, and operating means for shifting said dump conveyor within the confines of said housing compartment to said predetermined location therein.

9. In a receptacle of the character described and having a housing compartment for a container for money or other articles and a communicating safe storage compartment, a container shiftable confined in the housing compartment and having a bottom movable to dump the contents of the container, means holding the bottom of the container in contents supporting position, and operating means for shifting the container as a whole within the confines of the housing compartment to disengage the container bottom from said holding means and dump the contents of the container into said communicating safe storage compartment.

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