

No. 746,569.

PATENTED DEC. 8, 1903.

A. PEDERSON.
DISAPPEARING DOOR CABINET.

APPLICATION FILED APR. 16, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 2.

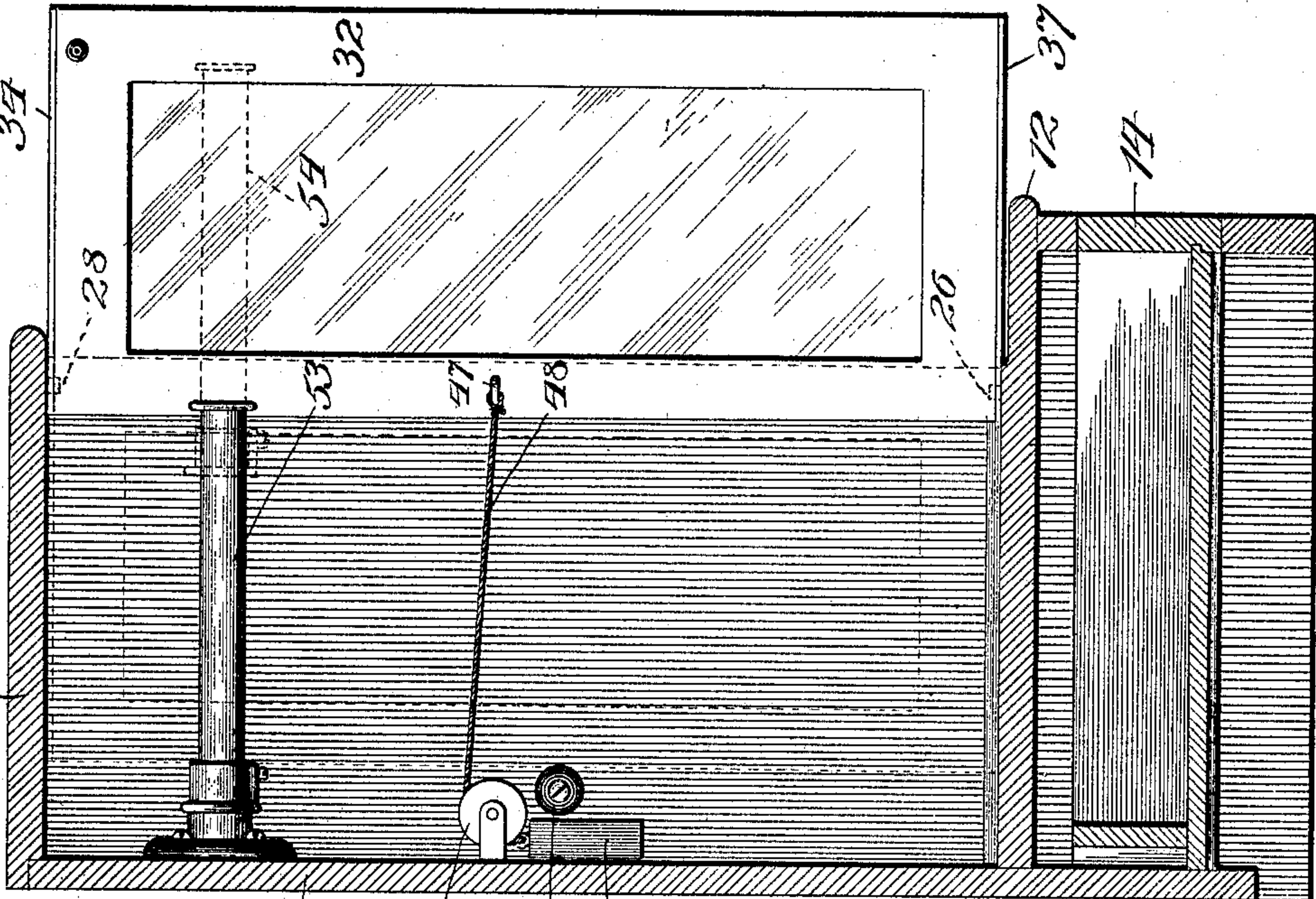
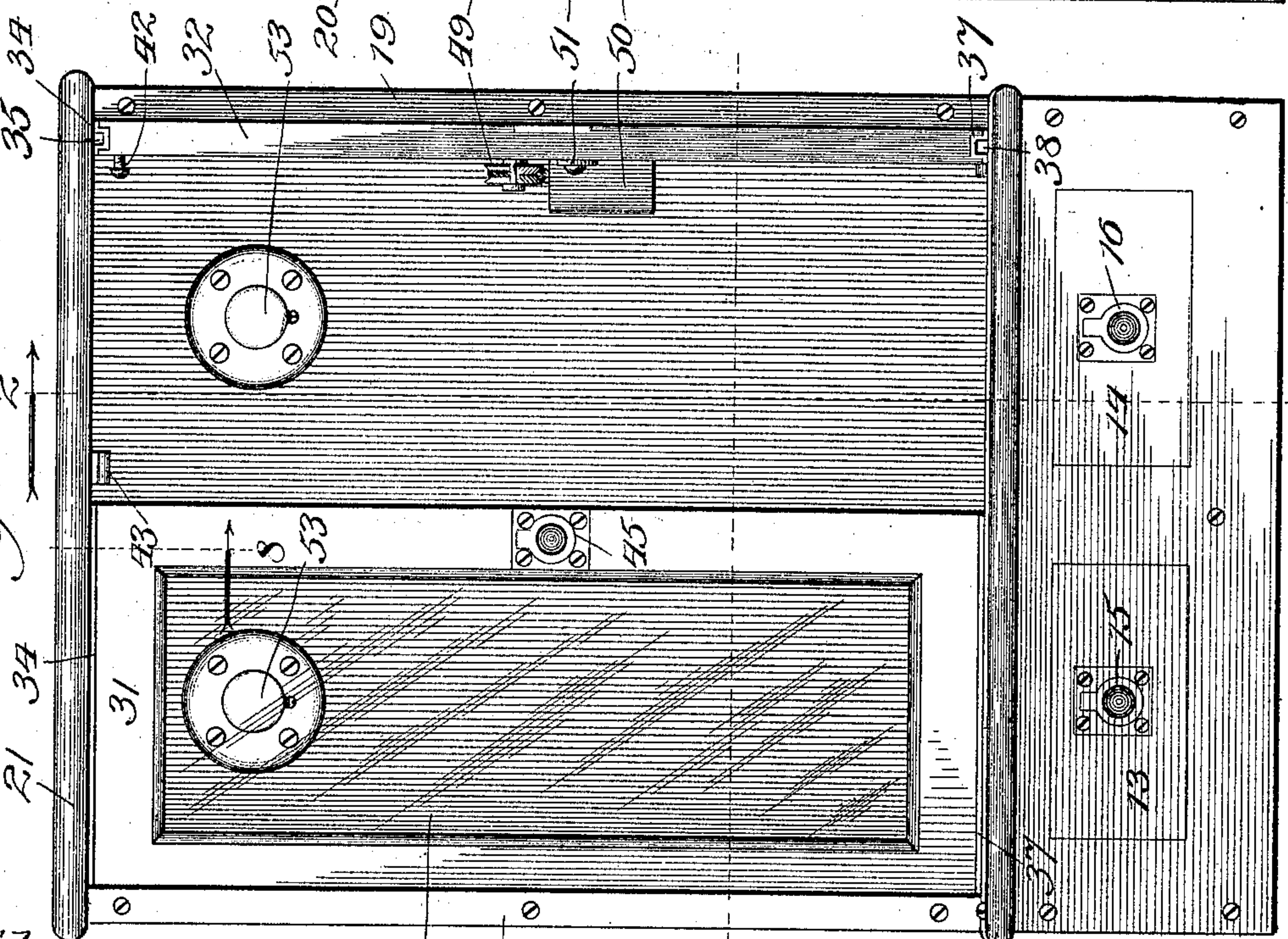


Fig. 1.



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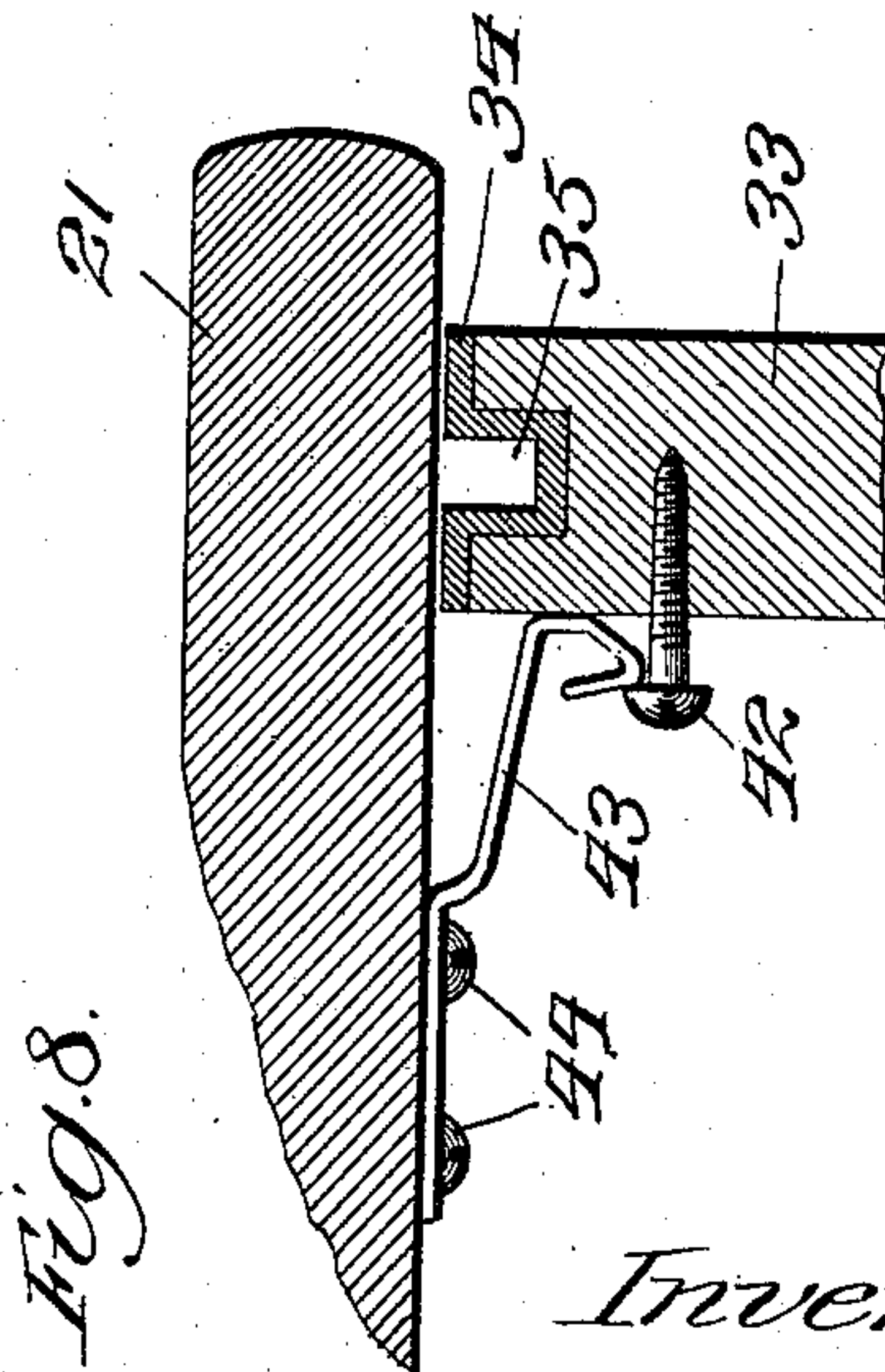
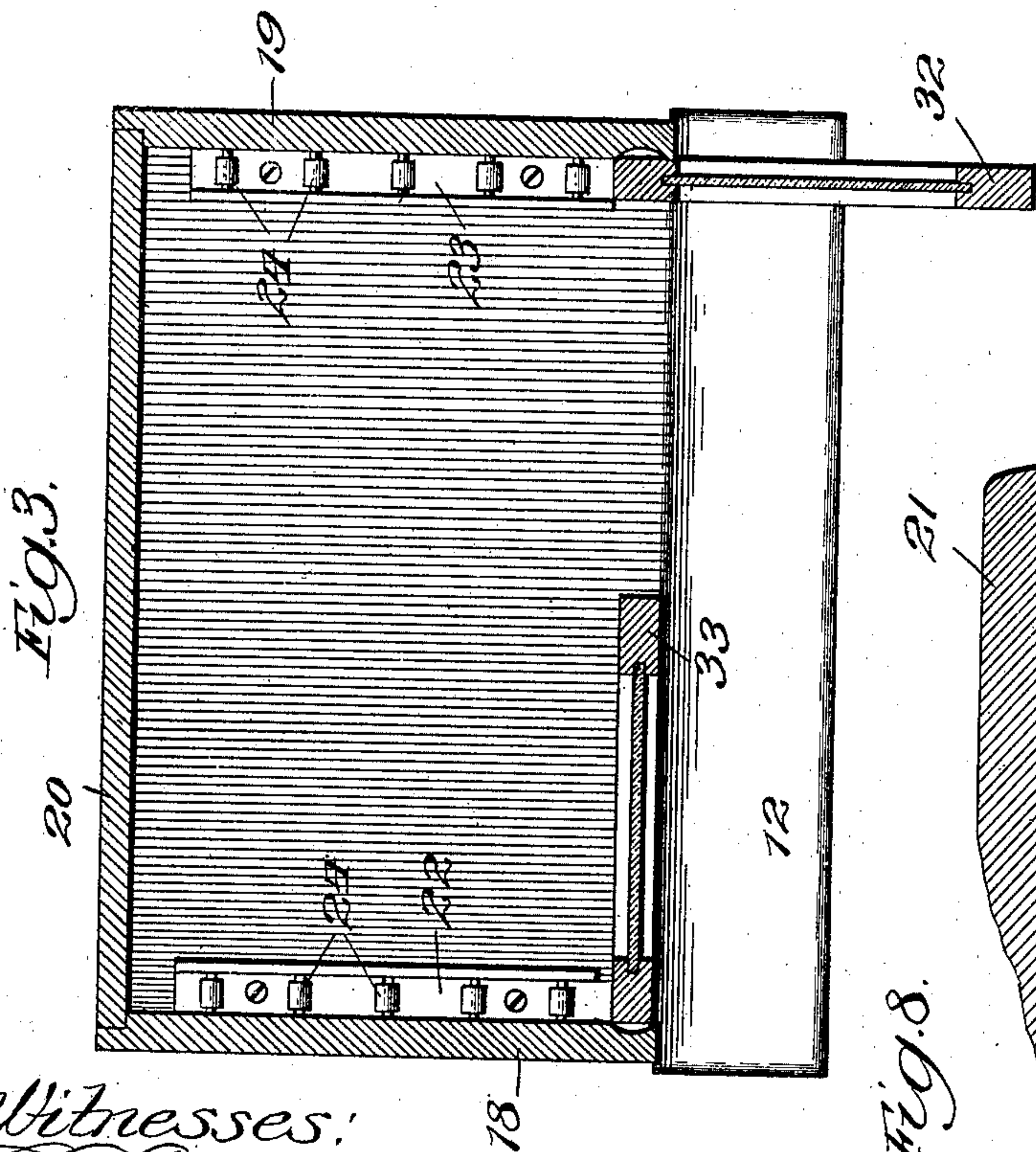
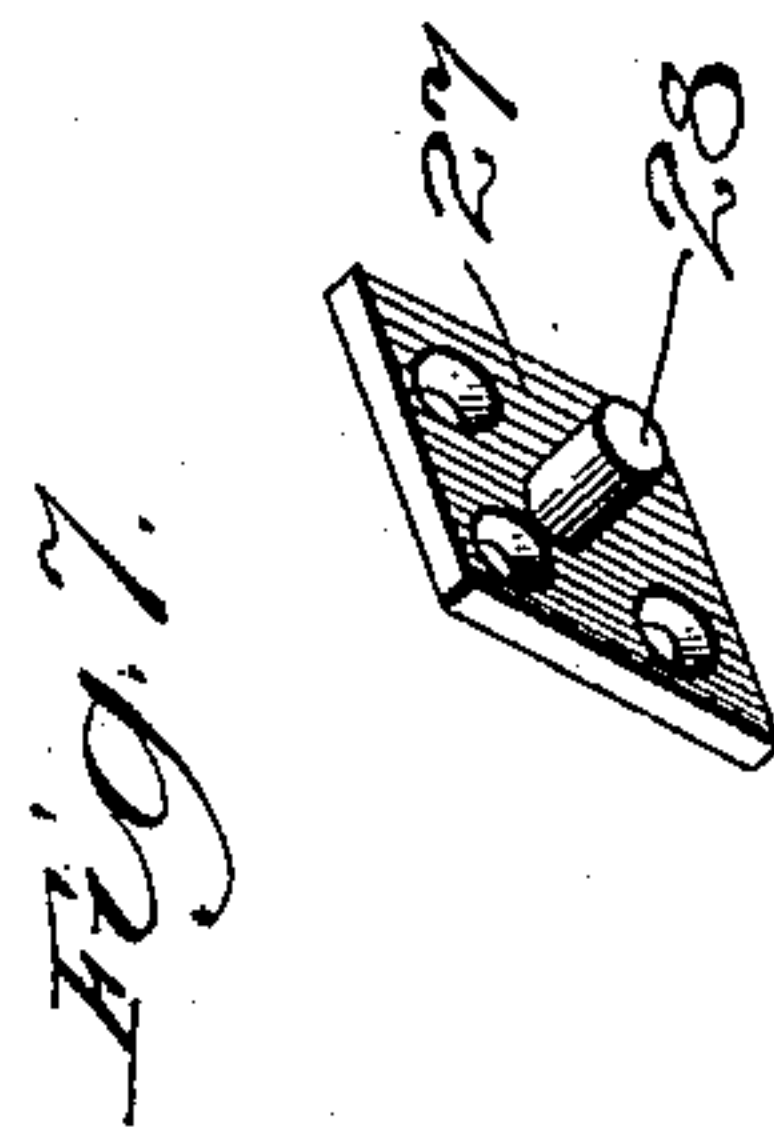
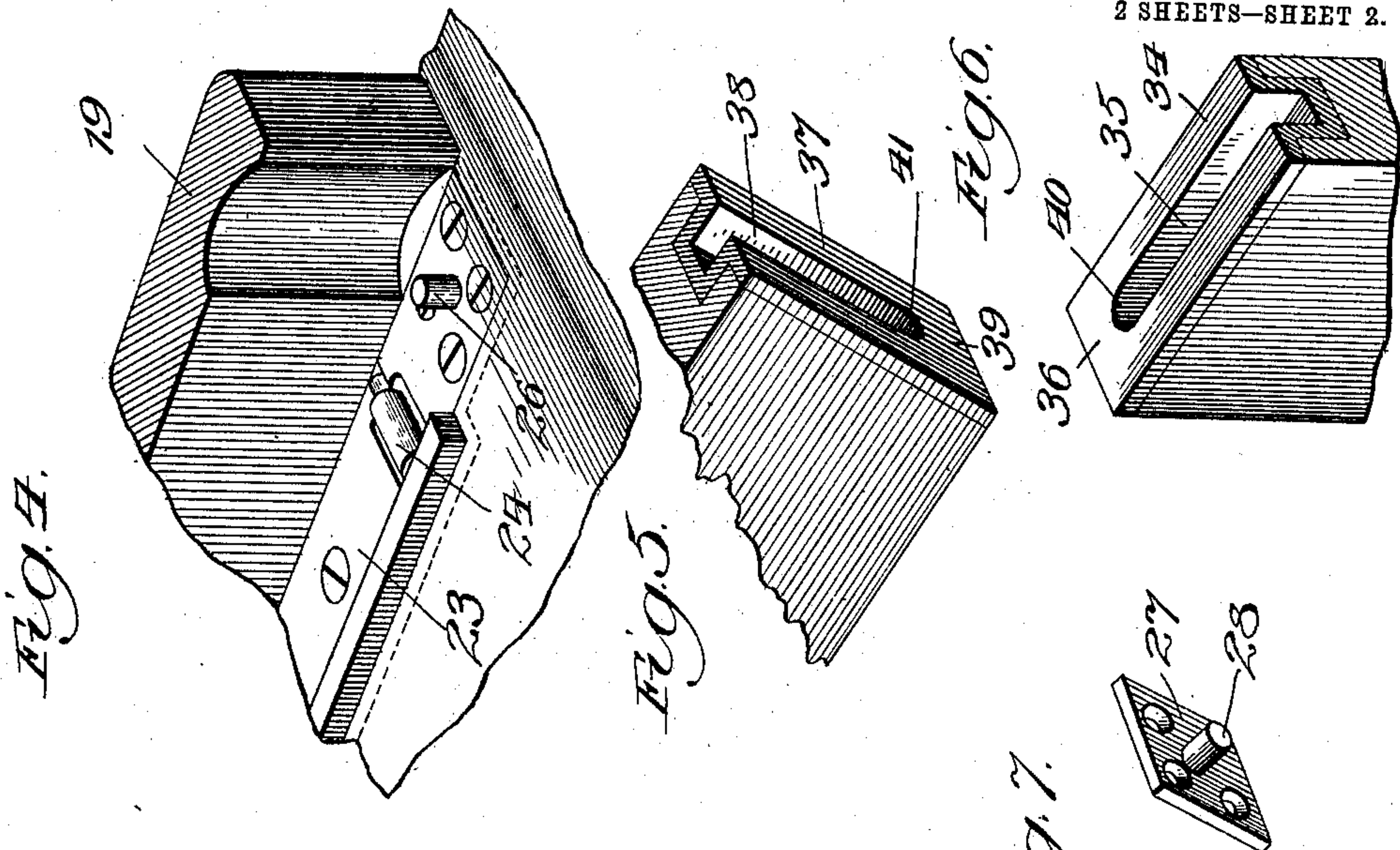
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NO MODEL.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

ADOLPH PEDERSON, OF AURORA, ILLINOIS.

DISAPPEARING-DOOR CABINET.

SPECIFICATION forming part of Letters Patent No. 746,569, dated December 8, 1903.

Application filed April 16, 1903. Serial No. 152,910. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH PEDERSON, a citizen of the United States, residing at Aurora, in the county of Kane and State of Illinois, have invented a new and useful Disappearing-Door Cabinet, of which the following is a specification in its best form now known to me, reference being had to the accompanying drawings, in which similar numerals indicate the same parts throughout the several views.

My invention relates to cabinets for use in the storage of clothing or for large book-cases, &c.

The object of my invention is to provide such a cabinet which can be closed tight with doors, preferably of glass, in which the doors when opened are entirely out of the way of the person desiring to inspect or handle the goods within the case.

Among the defective old forms which my invention is intended to succeed are, first, the ordinary form of cabinet with hinged doors swinging outward, which are very objectionable for the reason that when the doors are opened for the inspection of the goods they are liable to be broken by persons running against the doors or shoving objects onto them; second, cabinets where the doors slide vertically upward, which are objectionable for the reason that the top must be kept clear for the passage of such doors and cannot be conveniently used, also for the reason that the raised doors are unsightly in appearance and are liable to be broken should the counterweight-cord part and allow the doors to fall; third, those in which one door slides sidewise past its neighbor, so that in a two-door case it is impossible to have both doors open at the same time.

My invention consists in a cabinet possessing these advantages, which can be easily and cheaply constructed, and is not liable to easily get out of order in the hands of an ordinary person required to use it.

It also consists in many details of construction, which will hereinafter be more fully described and claimed.

Referring to the drawings, Figure 1 is a front view of a cabinet, showing the mechanism of my invention in its preferred form, one door being open and the other closed.

Fig. 2 is a side sectional view taken on line 2 of Fig. 1, showing one door open ready to be moved back into the case out of sight. 55
Fig. 3 is a plan sectional view taken on line 3 of Fig. 1. Fig. 4 is a detail view of the pivot on which each door moves and the track on which it slides as it disappears within the case. Fig. 5 is a detail view of 60 the rear portion of the bottom of the door. Fig. 6 is a similar view of the top of the door. Fig. 7 is a detail perspective view of the pin at the top of the cabinet on which the door swings. Fig. 8 is a detail view of the clutch 65 holding the door normally closed.

Referring again to the drawings, numeral 12 indicates the base of the cabinet having, when desired, in its lower portion the sliding drawers 13 and 14 of ordinary construction 70 adapted to be pulled out by the finger-rings 15 and 16. Rigidly secured to and rising from this base 12 are two sides 18 and 19 and the back 20 of an ordinary cabinet, the whole being capped by the top plate 21, as shown. 75 On the top of base 12 and within the cabinet-frame, as described and shown and parallel to the sides 18 and 19, respectively, are two tracks 22 and 23, having journaled upon them the rollers 24, adapted to have the doors slide 80 into the cabinet over them. Near the outer end of these tracks and rising therefrom are pins or pivots 26, as shown in Fig. 4, adapted to have the doors turn upon them in the manner hereinafter described. Secured to 85 the under side of the top by the plate 27 are depending pins 28, the depending pins 28 at each end of the base being directly over the pins 26, heretofore referred to, the relationship being as shown in dotted lines of Fig. 2. 90 I now provide two doors 31 and 32, preferably having glass 33 in them, so that the contents may be inspected from without. These doors are of such a width that together they just fit in and normally close the front of the cabinet. Upon the top of each door is a plate 95 34, having cut in it a slot 35, closed at its rear end 36, as shown. Similarly on the bottom of each door is a plate 37, having cut in it a slot 38, closed at its rear end 39, as 100 shown. The rear ends 36 and 39 of the slots in these plates are rounded in the curves 40 and 41, as shown, so as to form bearings adapted to turn upon the pins 28 and 26.

The plates 34 and 37 are preferably made, as shown in Fig. 2, to run the entire width of the top of the door. On the inside of each door, preferably near the top, is a screw 42, adapted to engage a spring 43, secured by screws 44 to the top 21 of the case. This spring 43 is of such a tension that, as shown in Fig. 8, it normally holds the doors closed; but a slight pull on the door by means of the finger-ring 45 is sufficient to detach the clutch and allow the door to be opened. Secured at about the middle of the back of the door on a staple 47 is a cord 48, passing over a pulley 49 at the back of the case. On the other end of this cord 48 is a weight 50 of sufficient size that a very little hand-pressure on the door will draw the door when in the position, as shown in Fig. 2, over the rollers 24 back into the case. At the rear of the case is a stop 51, preferably rubber covered, adapted to limit the motion of the door. The doors are, as heretofore described and as shown, so mounted that they normally turn upon the pins 26 and 28, and as long as they remain in any position between that shown at the left of Fig. 1 and that at the right of Fig. 1 they will continue so to turn. When they reach the position shown at the right of Fig. 1 and in Fig. 2, the doors and the slots 35 and 38 cut in the tops and bottoms are perpendicular to the front of the case and in line with the tracks 22 and 23. Consequently they are adapted under the action of the weight 50, heretofore referred to, to move or be moved back into the case.

The mechanism herein described was designed especially for use in a retail gentlemen's clothing store in connection with traveling clothes-hangers, which are represented at the top of the case by the numerals 53 and 54 and fully described and claimed in my application filed March 8, 1903, Serial No. 150,002. In the use of these hangers clothing hangs on the carrier portion 54, which slides on the fixed bracket 53, movable bodily, as shown in Fig. 2, out in front of the case, so that the clothing may be inspected and removed. The cabinet here described is of especial advantage in connection with such hangers or carriers, in that the doors may be moved back into the case, so that they may be out of the way, and then all the carriers may be moved out at one time, if desired.

In the operation of my invention the clothing salesman approaches the case, in which both doors are normally in the position shown at the left in Fig. 1, takes hold of the ring 45 or any other suitable handle and gives the door a slight pull, thus detaching it from the spring-clutch 43. He now swings the door on the pins 26 and 28 slowly outward to the position shown in Fig. 2, where with a slight hand-pressure on the front of the door it is readily moved backward along the track over the rollers 24 into the case where the door is entirely within the case and out of the way. When the doors are in this position,

the salesman is at liberty to move the clothing-carriers 44 outward and examine the suits thereon as desired. When the work is completed, the carriers 54 are moved back into the case and the salesman takes hold of the doors which are within the case, pulls them outward to the position shown in Fig. 2, and then turns the doors on pins 28 and 26 from that position to the position shown at the left in Fig. 1, where the doors are again engaged by the clutches 43 and the front of the case is closed.

I do not wish to be understood as limiting myself to the exact details of construction, which may be varied within reasonable limits without departing from my invention.

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

1. In mechanism of the class described in combination with the sides, top and bottom of a cabinet, a pivot-pin projecting from the top near the side of the cabinet, another pivot-pin projecting upward from the base adjacent to the side and approximately in a vertical line with the first pivot, a door having slots in its top and bottom closed near the back of the door adapted to have said pins rest within said slots and bear against the closed portions of the rear ends of the slots so as to form a pivotal bearing about said pins on which the door is adapted to swing and a roller or equivalent antifriction-track upon the bottom of the case approximately perpendicular to the front of the case and in line with said pivots adapted to have the door move over it.

2. In mechanism of the class described, in combination with the sides, top and bottom of a cabinet, a pin-pivot 28 projecting from the top near the side of the cabinet, another pin-pivot 26 projecting upward from the base adjacent to the side and approximately in a vertical line with the pivot 28, a door having slots in its top and bottom closed near the back of the door adapted to have said pins rest within said slots and bear against the closed portions of the rear ends of the slots so as to form pivotal bearings about said pins on which the door is adapted to swing, an antifriction-track upon the bottom of the case approximately perpendicular to the front of the case and in line with said pivots adapted to have the door move over it and counterbalancing mechanism adapted to assist in moving the door into the case.

3. In mechanism of the class described, in combination with the bottom, top and side walls of a case, a door 32 adapted to fit into the front of the case, a plate 34 having a slot 35 closed at 36 upon the top of the wall, a plate 37 having a slot 38 closed at 39 upon the bottom of the door, a pin 28 projecting downward from the top of the case adapted to journal at 40 on the end of plate 34 upon the top of the door, another pin 26 projecting upward from the bottom of the case in line with pin 28 adapted to journal at 41 in

the plate 37 upon the bottom of the door, a track 23 having rollers 24 thereon running along the base of the cabinet adjacent to the side and in line with said pins 26 and 28, a cord 48 attached to the door adapted to pass over a pulley 49 at the back of the case, and a weight 50 secured to said cord 48 adapted to assist in moving the door into the case over said rollers.

4. In mechanism of the class described, in combination with the bottom, side and top walls of a case, a door 32 adapted to fit into the front of a case, a plate 34 having a slot 35 therein closed at 36 upon the top of the door, a plate 37 having a slot 38 closed at 39 upon the bottom of the door, a pin 28 projecting downward from the top of the case adapted to journal at 40 in the end of plate 34 in the top of the door, another pin 26 projecting upward from the bottom of the case in line with pin 28 adapted to journal at 41 in the plate 37 in the bottom of the door, a track 23 having rollers 24 thereon, running along the base of the cabinet adjacent to the side in line with said pins 26 and 28, a cord 48 attached to the door adapted to pass over a pulley 49 at the back of the case, a weight 50 secured to said cord 48 adapted to assist in moving the door into the case over said rollers and

clutch mechanism adapted to normally hold the doors closed.

5. In mechanism of the class described, in combination with the bottom, side and top walls of a case, a door 32 adapted to fit into the front of the case, a plate 34 having a slot 35 therein closed at 36 upon the top of the door, a plate 37 having a slot 38 closed at 39 upon the bottom of the door, a pin 28 projecting downward from the top of the case adapted to journal at 40 on the end of plate 34 in the top of the door, another pin 26 projecting upward from the bottom of the case in line with pin 28 adapted to journal at 41, in the plate 37 on the bottom of the door, a track 23 having rollers 24 thereon running along the base of the cabinet adjacent to the sides in line with said pins 26 and 28, a cord 48 attached to the door adapted to pass over a pulley 49 at the back of the case, a weight 50 secured to said cord 48 adapted to assist in moving the door into the case over said rollers, all of the parts being arranged and disposed substantially as shown and described for the purposes set forth.

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