

No. 885,713.

PATENTED APR. 28, 1908.

J. E. BENJAMIN.
RECORDING DESK AND CASH HOLDER.

APPLICATION FILED JUNE 26, 1907.

3 SHEETS—SHEET 1.

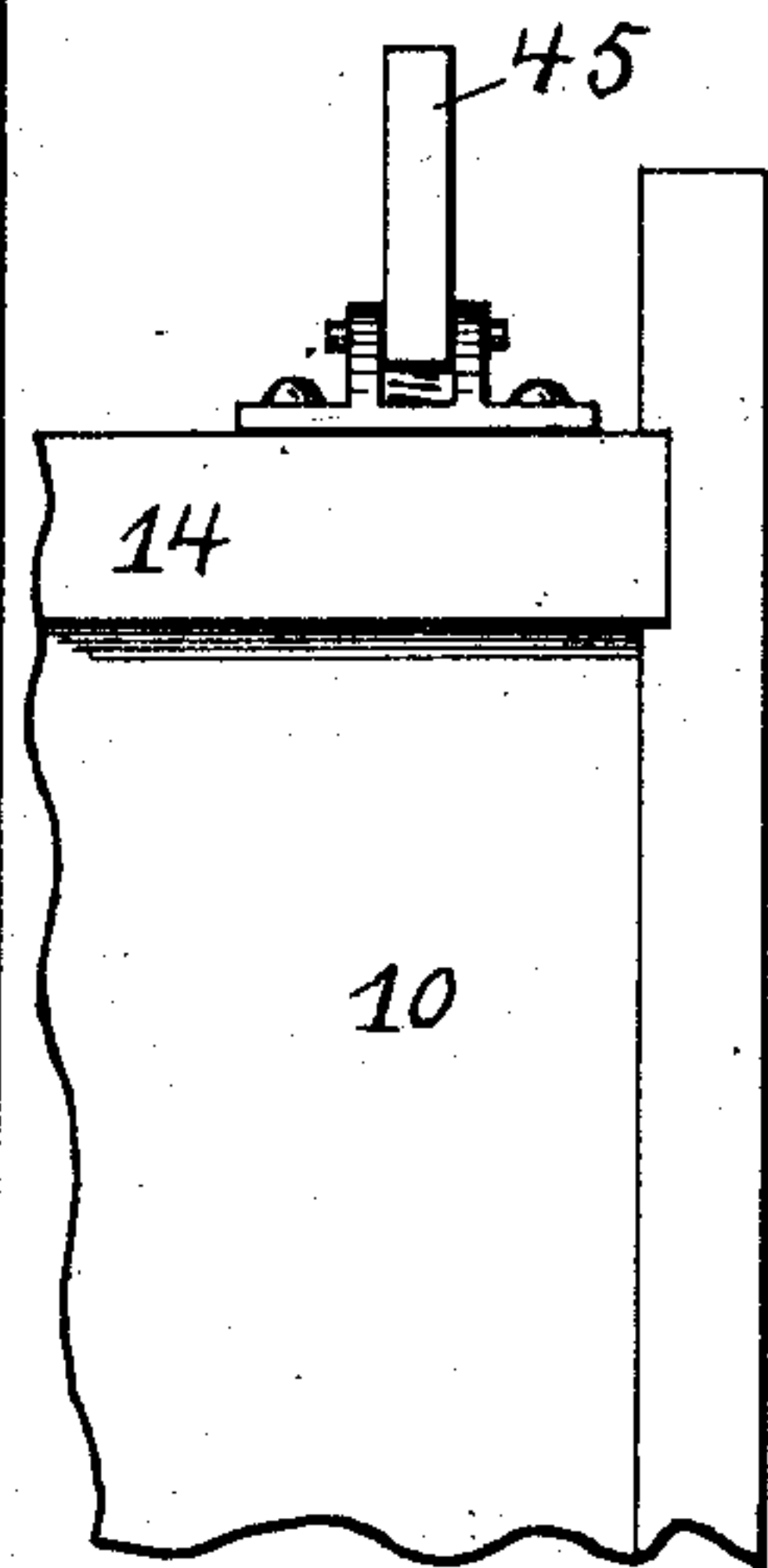
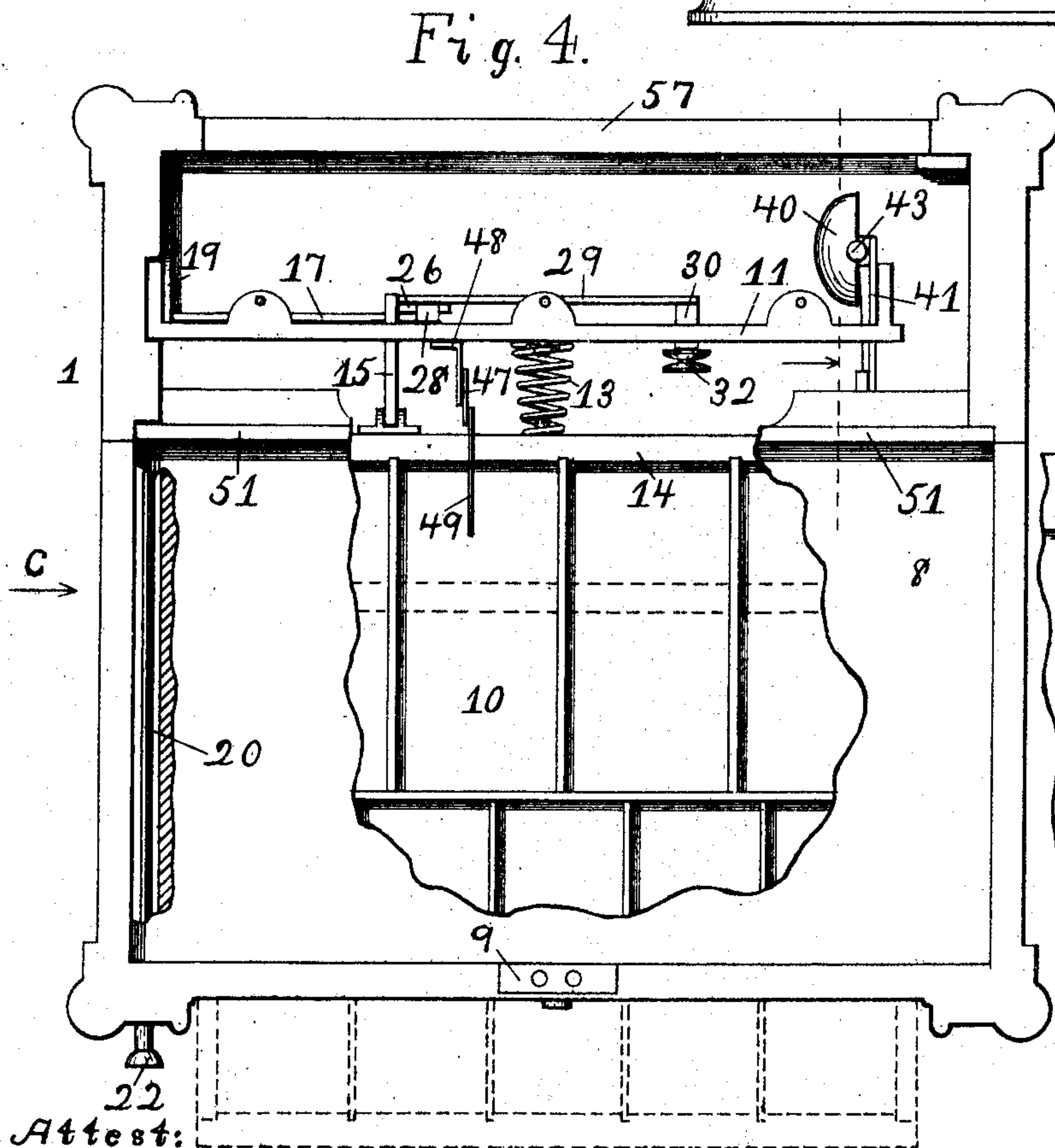
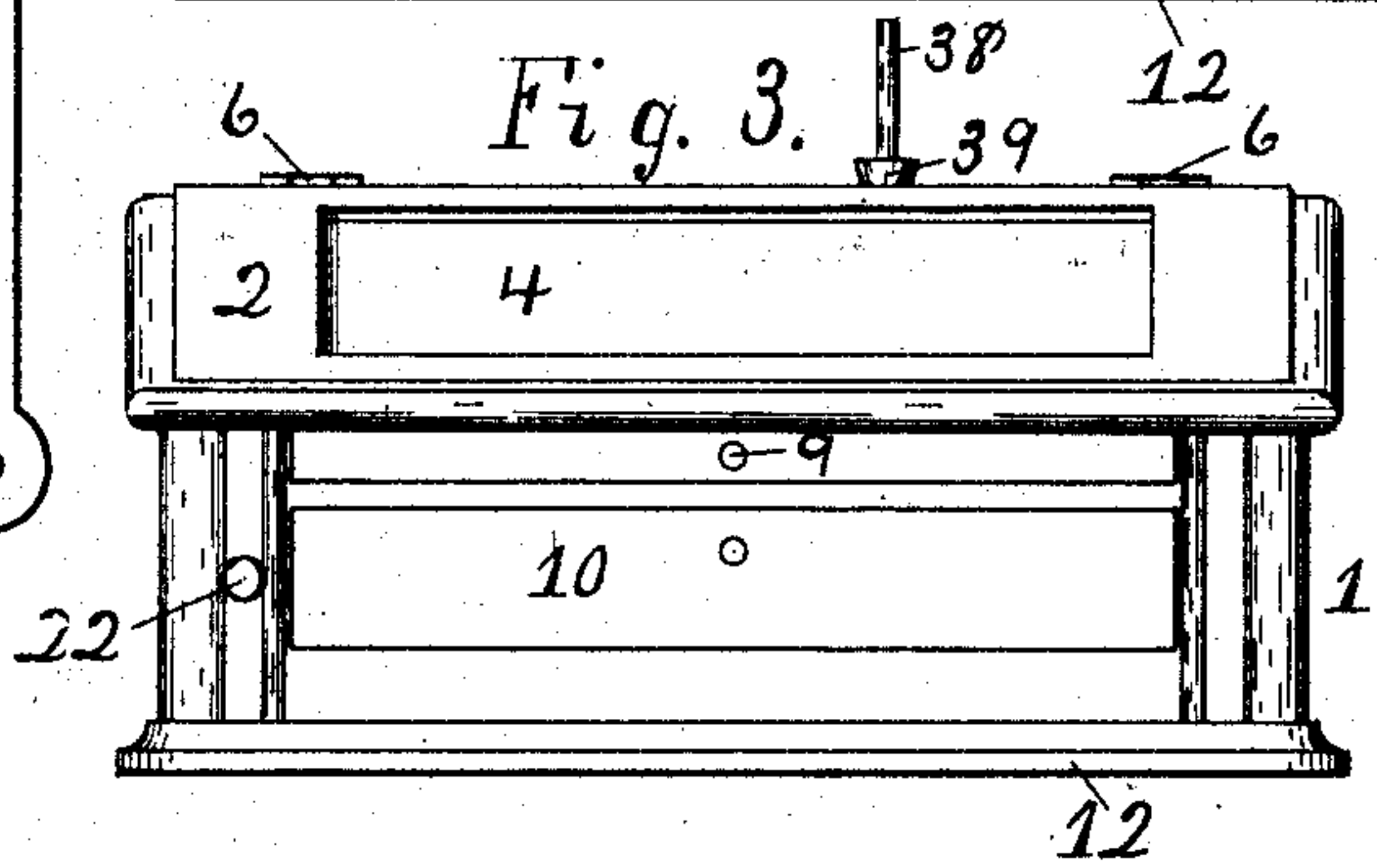
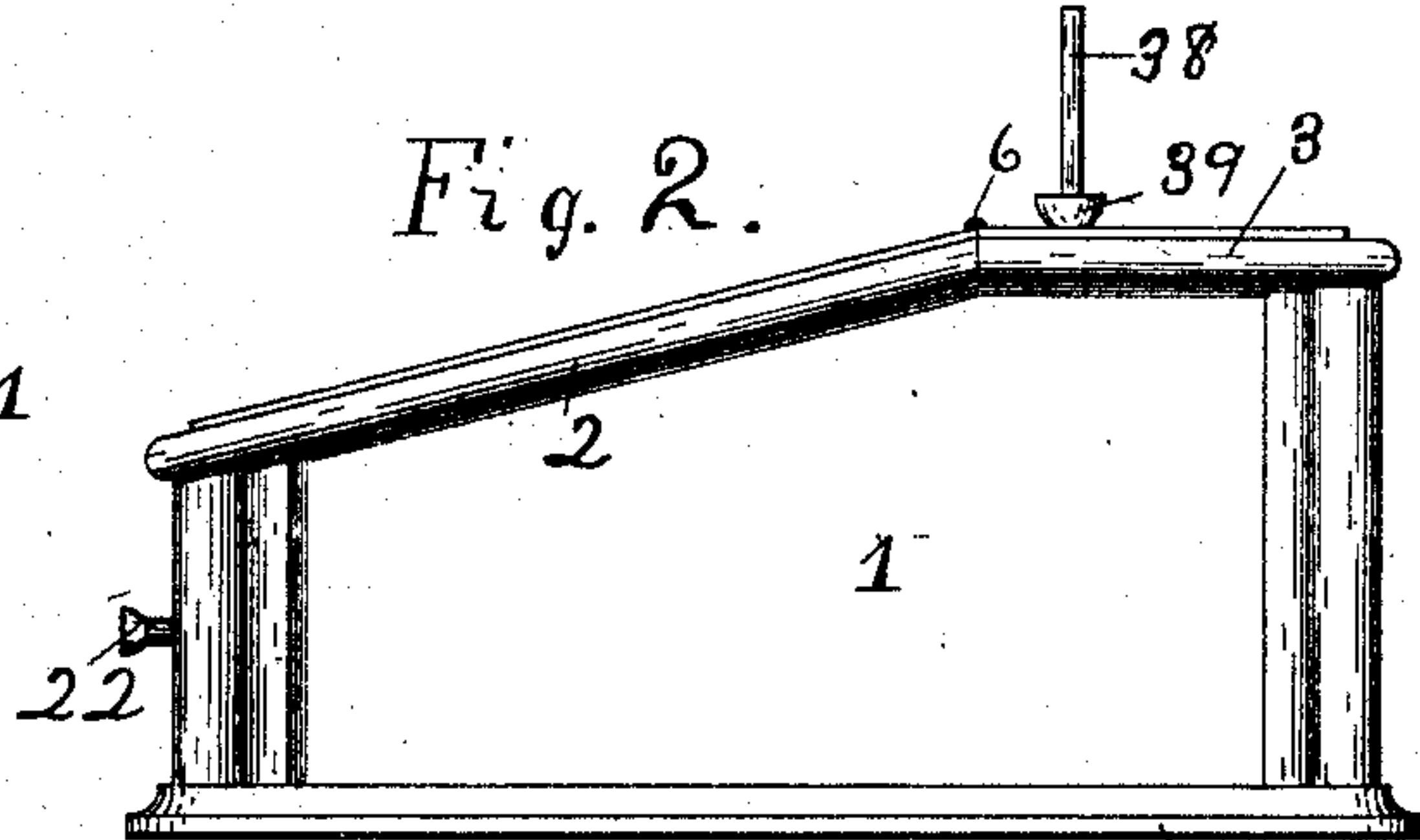
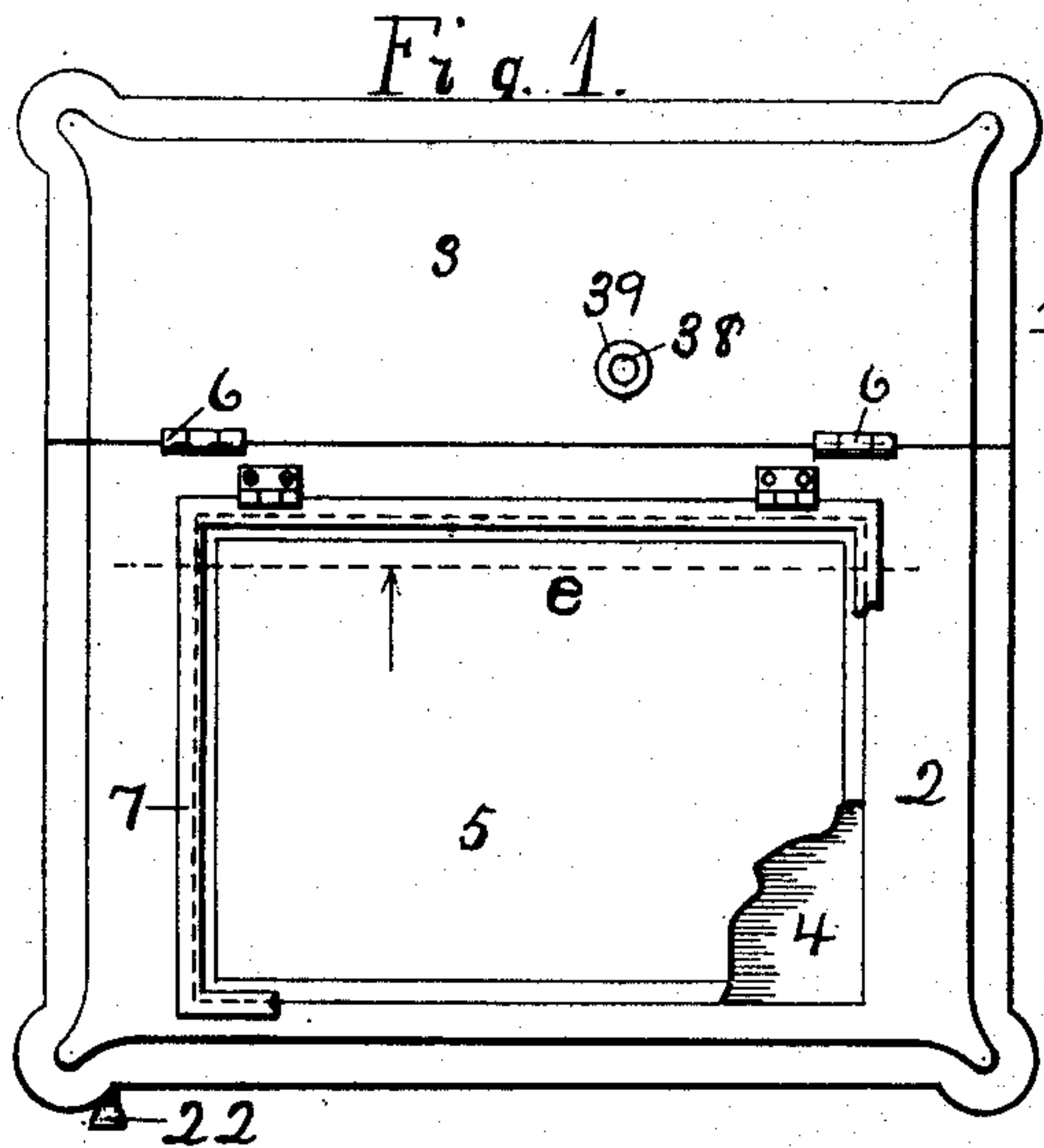


Fig. 5.

Attest:
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Inventor:
J. E. Benjamin,
by E. B. Whitmore, Atty.

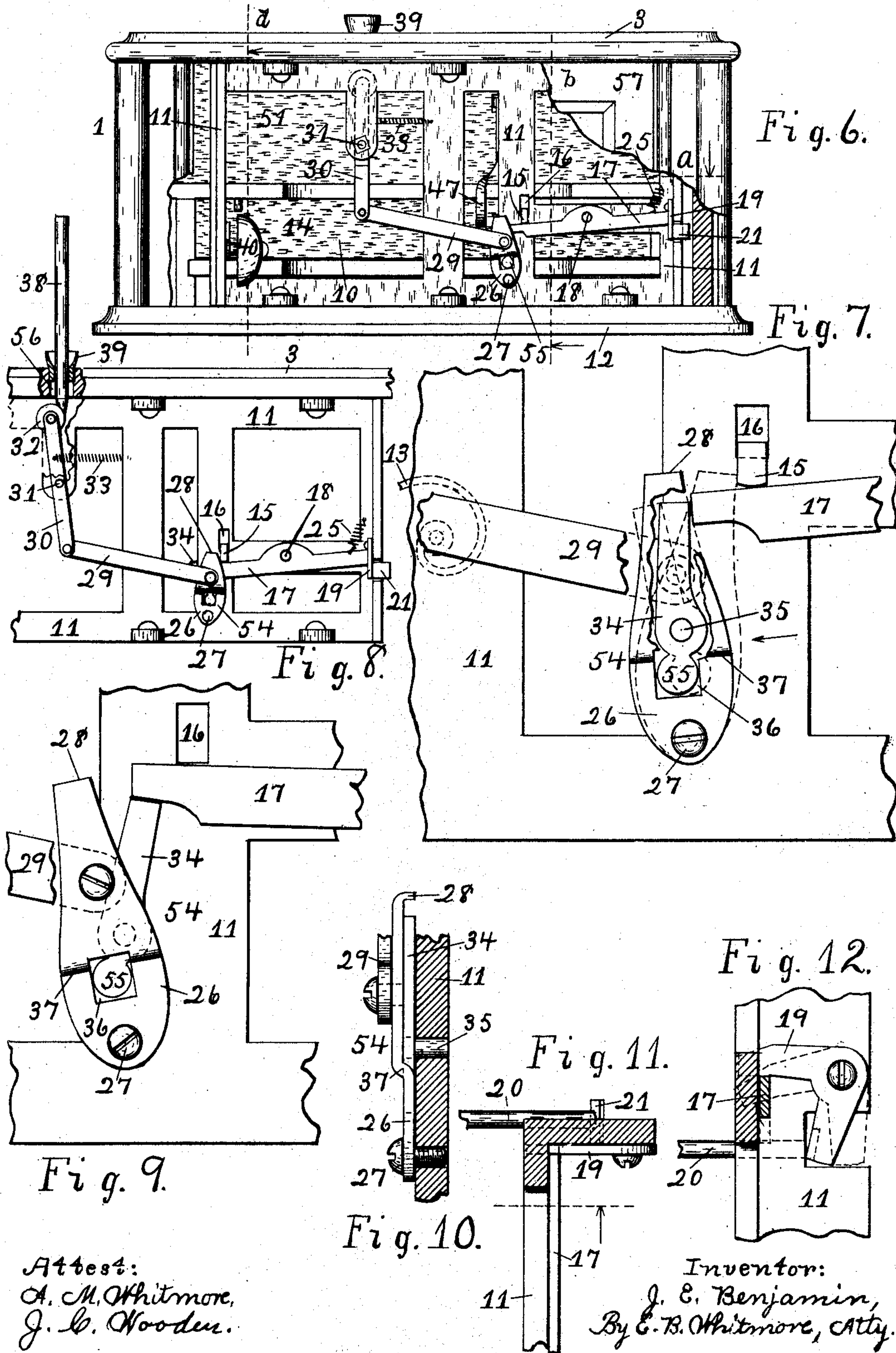
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3 SHEETS—SHEET 3.

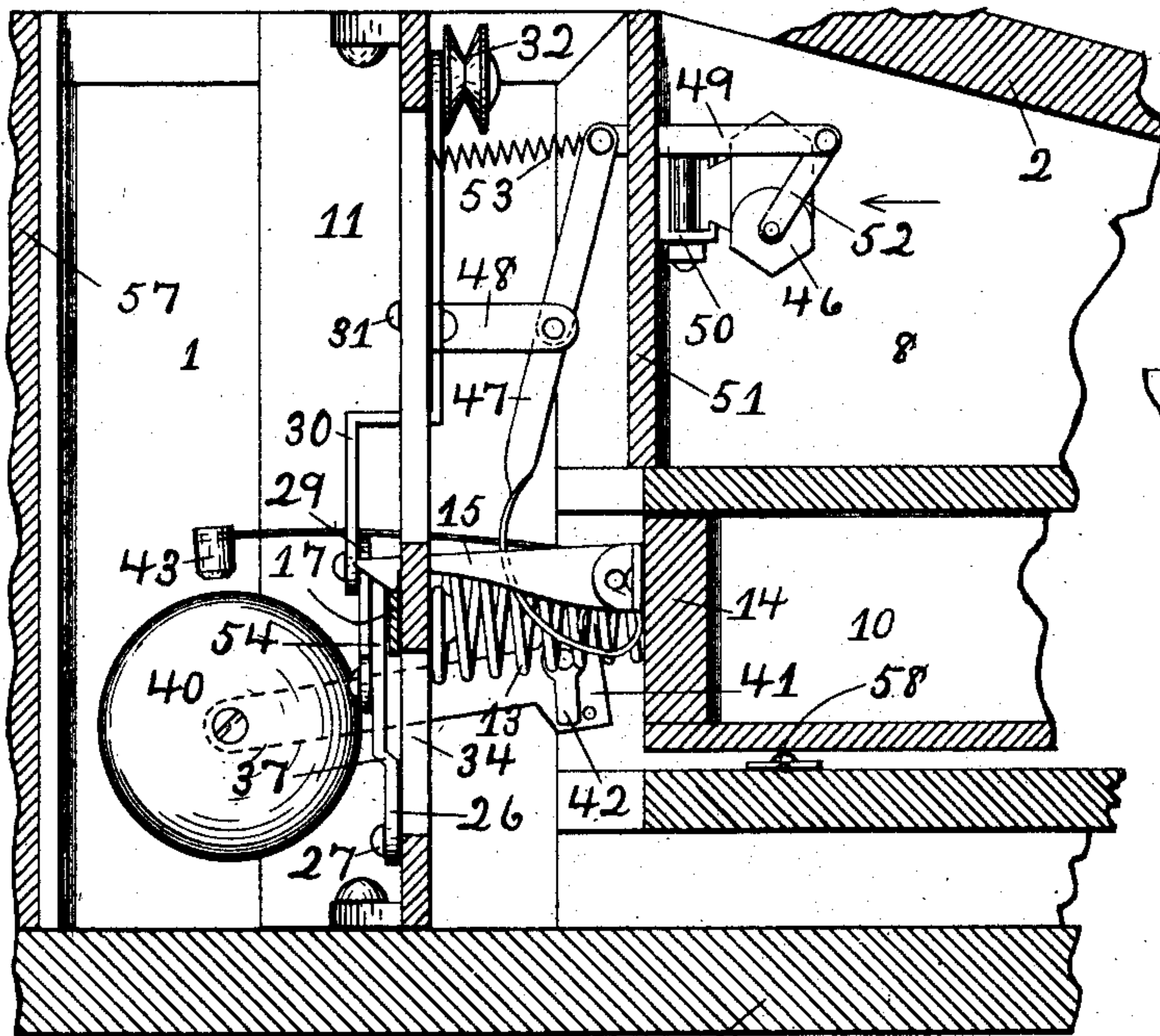


Fig. 13.

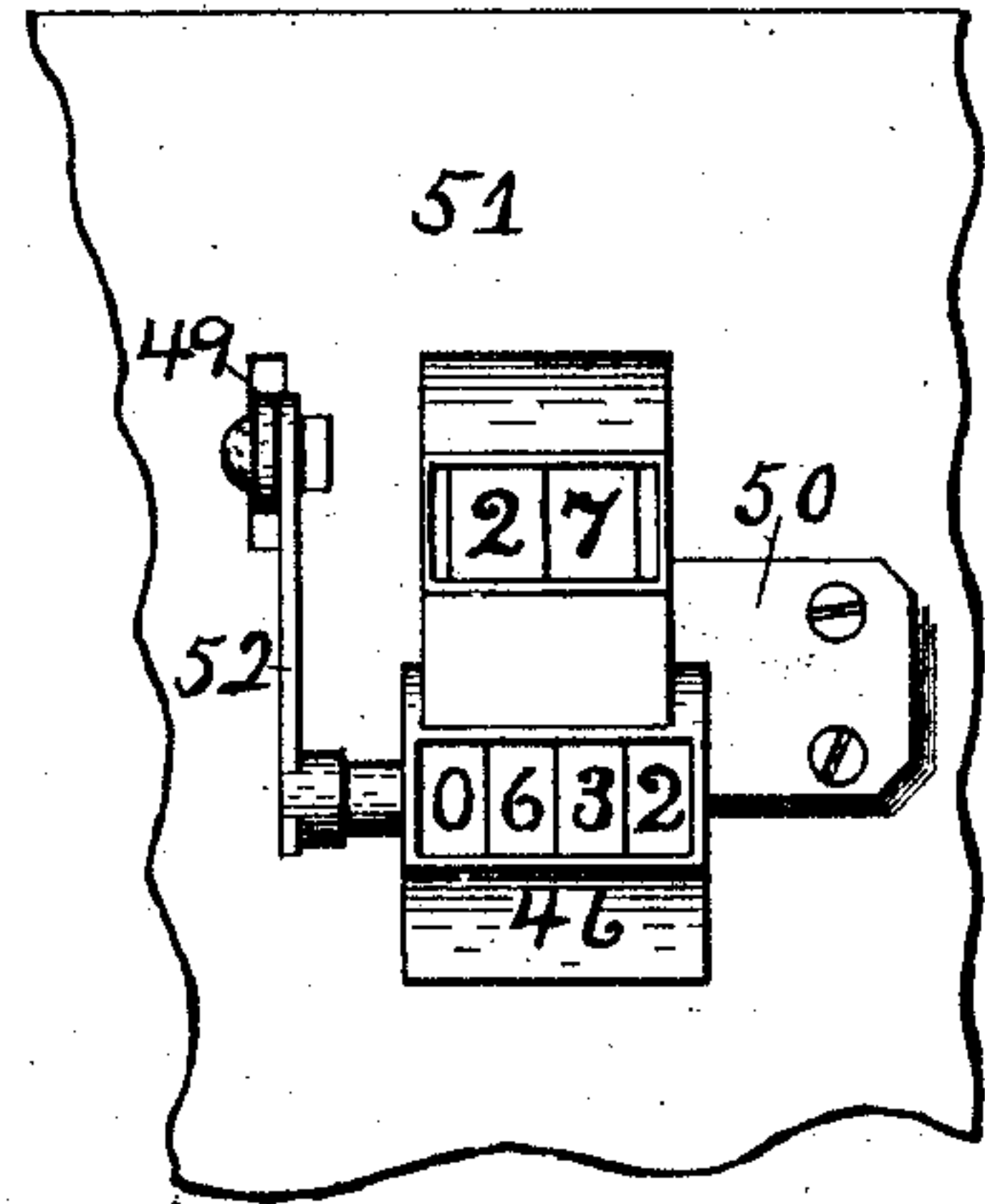


Fig. 14.

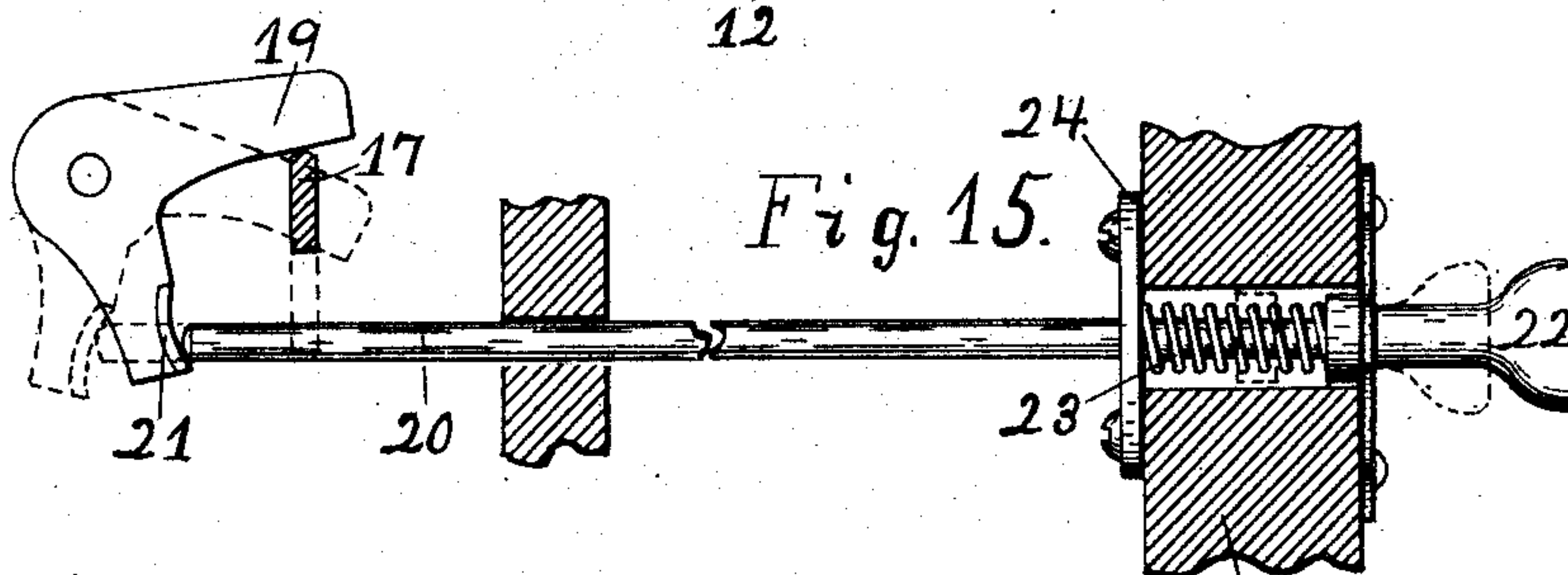


Fig. 15.

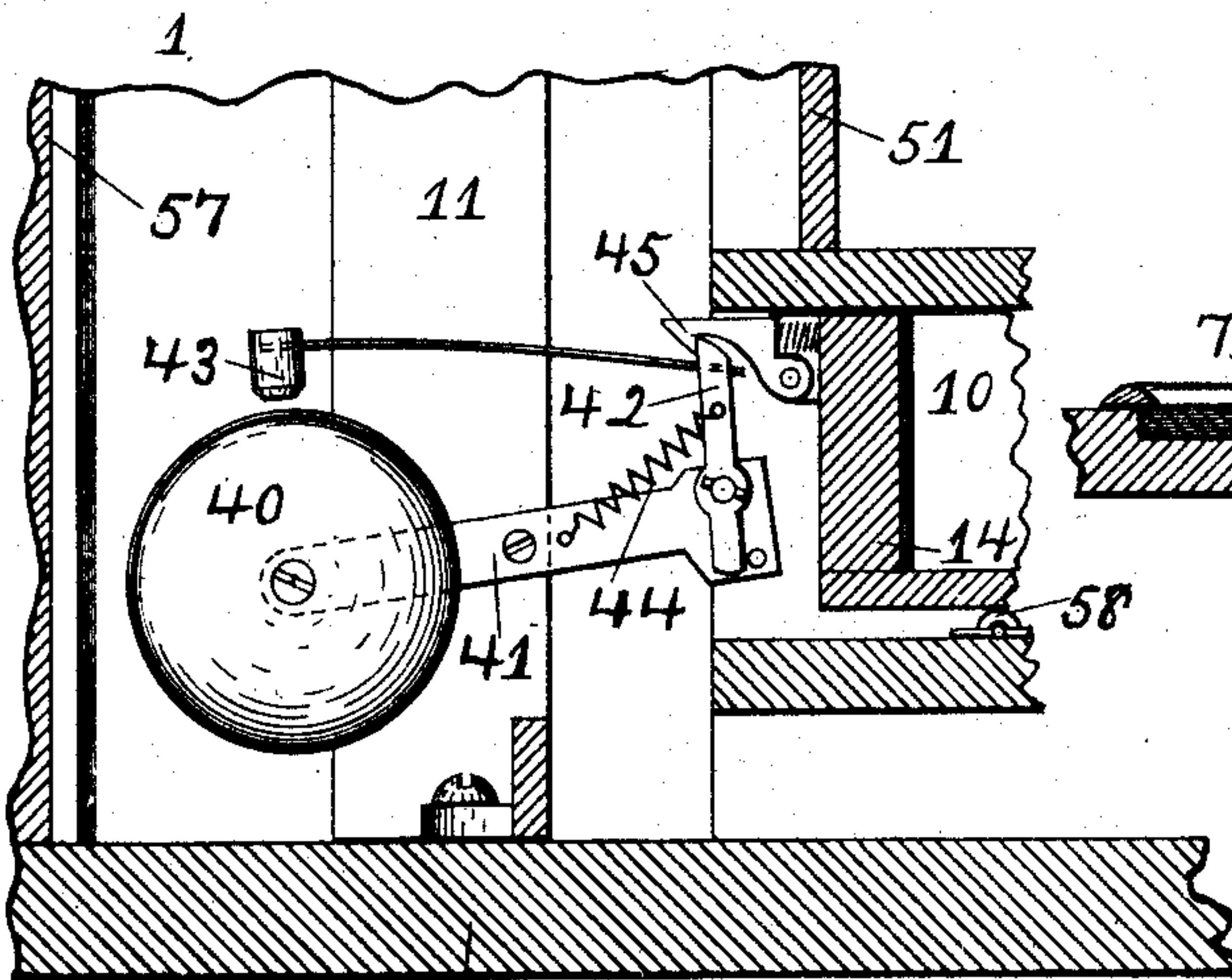


Fig. 16.

Attest:
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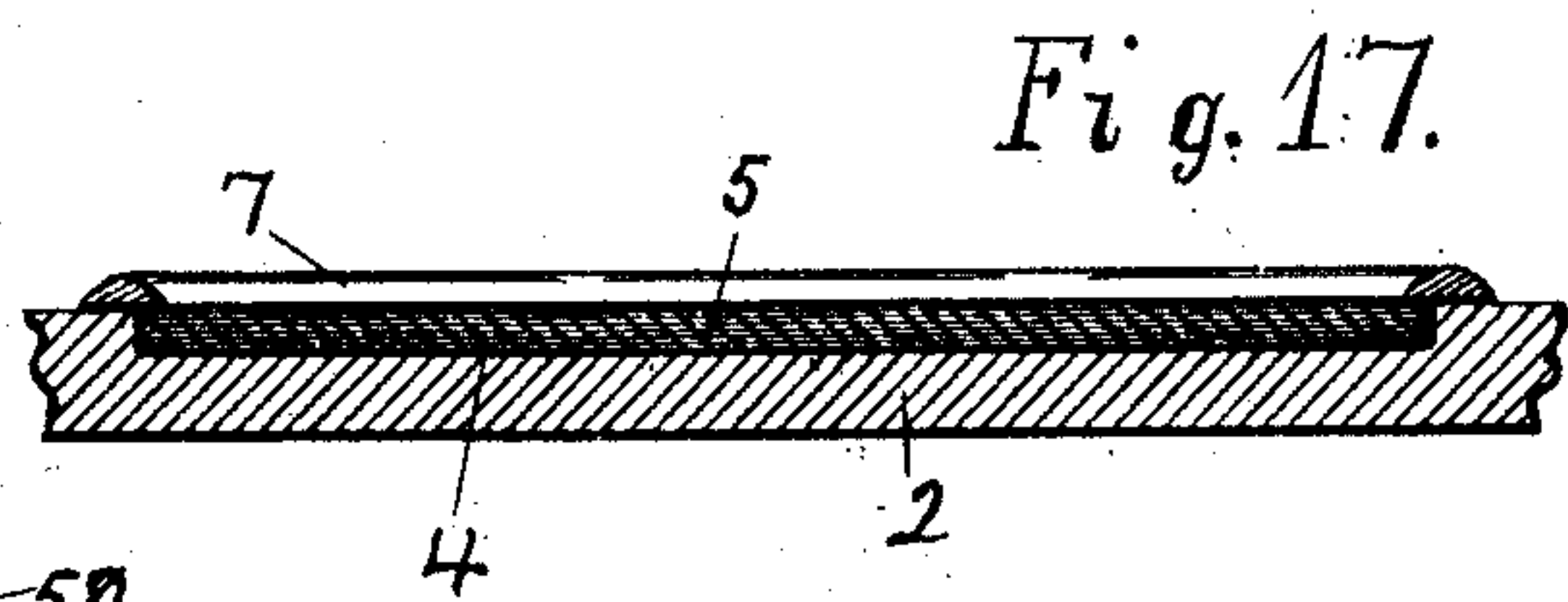


Fig. 17.

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UNITED STATES PATENT OFFICE.

JOSEPH E. BENJAMIN, OF ROCHESTER, NEW YORK.

RECORDING-DESK AND CASH-HOLDER.

No. 885,713.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed June 26, 1907. Serial No. 380,938.

To all whom it may concern:

Be it known that I, JOSEPH E. BENJAMIN, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Recording-Desks and Cash-Holders, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

My invention is an improved article for use in commercial establishments and business houses, it being designed more particularly for use in retail trade as in groceries and retail establishments, the invention being a combined recording desk and cash holder embodying improvements and advantages hereinafter set forth.

With this invention is employed a pad of printed blank record sheets, and the invention includes in its operation the employment of a lead-pencil to be used upon the sheets, the construction of the mechanism and the operation of the parts being such that while the pencil is in place in the top or cover of the desk, the cash drawer cannot be opened, and the drawer, when open, cannot be closed until the pencil is replaced in the cover.

The opening of the drawer each time is accompanied by the ringing of a bell, and an advance count of 1 is made in the continuous counter each time the drawer is opened.

When the pencil is taken from its holder at any time to make an entry on a record sheet the parts of the mechanism for controlling the cash drawer immediately assume positions in which the drawer may be opened by pressing a push-button.

Other objects and advantages of the invention will be brought out and made to appear in the following description, and the novel features pointed out in the appended claims, reference being had to the accompanying drawings which, with the numerals of reference marked thereon, form a part of this specification.

Figure 1 is a plan of the desk with parts broken away. Fig. 2 is a right-side elevation, further showing the form. Fig. 3 is a front elevation with the pad omitted. Fig. 4 is a plan of the body of the desk with the cover omitted and parts broken away, the drawer being shown by dotted lines as open. Fig. 5 is a plan of a portion at one corner of the drawer, showing the bell catch-hook. Fig. 6 is a rear elevation of the device with

the rear door and other parts mainly broken away and some minor parts omitted. Fig. 7 is a rear elevation of a portion of the vertical fixed standard or frame and some associated parts, parts being shown in two positions by full and by dotted lines, and other parts broken away. Fig. 8 is a rear elevation of parts of the standing frame, further showing some of the operating parts, parts being broken away and vertically sectioned. Fig. 9 is a rear elevation of a portion of the frame and associated parts, the latter in different positions than shown in Fig. 7, parts being broken away. Fig. 10 is an edge view of the duplex detent seen as indicated by arrow in Fig. 7, the adjacent part of the frame being in vertical section. Fig. 11 is a plan of one end of the frame a part being in horizontal section on the dotted line *a* in Fig. 6, further showing the bell-crank and adjacent portion of the push-rod. Fig. 12 is an elevation of a part of the frame seen as indicated by arrow in Fig. 11, with parts vertically sectioned on the dotted line at the point of the arrow, further showing the bell-crank and associated parts, parts being shown in two positions by full and by dotted lines. Fig. 13 is a vertical transverse section of parts on the dotted line *b* in Fig. 6, further showing the operating parts, parts being broken away. Fig. 14 is an elevation of parts within the desk, seen as indicated by arrow in Fig. 13. Fig. 15 is a side elevation of the push-rod and associated parts seen in a direction opposite that in which Fig. 12 is seen and as indicated by arrow *c* in Fig. 4, parts being shown in two positions by full and by dotted lines. Fig. 16 is a vertical transverse section of parts taken on the dotted line *d* in Fig. 6, showing the bell and mechanism for ringing it. Fig. 17 is a substantially vertical section of a portion of the lid and the pad of blank sheets taken as on the dotted line *e* in Fig. 1. Figs. 5, 7 and 9 to 16 inclusive are drawn to scales larger, and Figs. 1, 2, 3 and 17 to scales smaller than that of Figs. 4, 6 and 8.

In the drawings 1, Figs. 1, 2, 3 and 4, is the body of the device it being a rectangular inclosure with an inclined lid 2, hinged at 6 to a fixed top board or portion 3 of the cover. The lid 2 is formed with a shallow rectangular depression or recess 4, in which to hold a pad 5 of paper, Figs. 1 and 17, the pad being held in place or confined by a metal open frame or holder 7 hinged to the lid, as shown.

This member 7 is of such relative size as to slightly overhang at its inner edges the sides of the recess 4, as appears in Fig. 1, and thus lap slightly onto the edges of the pad of paper held beneath it.

The hinged cover 2 closes an apartment 8, Figs. 4 and 13, the cover being secured by an ordinary lock 9, Figs. 3 and 4.

Beneath the apartment 8 is the cash drawer 10, Figs. 3, 4, 5, 6, 13 and 16, subdivided into apartments as may be found convenient, back of which drawer is a vertical rectangular fixed open standard or frame 11, Figs. 4, and 6 to 13 inclusive, and 16, extending from the base 12 of the body 1 to the rigid cover 3 to both of which parts it is rigidly secured. A spiral spring 13, Figs. 4, 7 and 13, secured to the front side of the frame 11 and pressing the rear wall 14 of the drawer 10 acts to throw the drawer, when released, forward and partially out of the body 1, as represented by dotted lines in Fig. 4. A catch element 15, Figs. 4, 6, 7, 8 and 13, attached to the drawer 10 in position to have its outer end pass through an opening 16 in the frame 11 and hook thereon, serves to hold the drawer normally within the body 1 and closed, against the action of the spring 13.

To raise the catch 15 a release bar 17 is employed, shown in Figs. 4, 6, 7, 8, 9, 11, 12, 13 and 15, pivoted to the frame 11 at 18, to swing in a vertical plane, with one end under and touching the projecting end of the catch. This bar is tilted to lift the point of the catch by means of a bell-crank 19 actuated by a push-rod 20 extending from the front of the desk backward to the bell-crank which has a lateral projection 21 to receive the thrust of the rod. At its forward end the push-rod is provided with a projecting button 22, Figs. 3, 4 and 15, to be pressed by the thumb when it is wished to open the cash drawer 10. A spring 23 on the rod 20, confined by a plate 24 on the inner face of the front wall of the desk, acts to hold the push-rod and button 22 normally in their forward positions with the adjacent or rear end of the release bar 17 elevated and the catch 15 acting. A slender spiral spring 25, Figs. 6 and 8, connecting the release bar and the frame 11, acts to hold the said bar normally in its position of idleness, shown in Figs. 6, 7 and 8.

The release bar 17 is further held and controlled by a duplex or two-part detent 54, Figs. 4, 6, 7, 8, 9, 10 and 13, consisting of an outer or major part 26 fulcrumed at 27 to the rear side of the frame 11, and an inner or minor part 34 fulcrumed on a stud 35 rigid in said frame. The parts 26 and 34 of the detent act independently and both move as levers and always in opposite directions, the major part 26 controlling and actuating the minor part 34. The major part 26 is formed at its upper end with an intumed lip 28 in position to extend over the upper edge of the

release bar to, at intervals, hold the adjacent end of the release bar down and prevent it from releasing the catch 15 and allow the cash drawer to open. The minor part 34 of the detent is in position to have its upper free end at intervals swing under the release bar 17, as shown in Fig. 9, and so temporarily hold the end of the bar in its elevated position, the two parts 26 and 34 acting alternately to control the release bar, either one idling while the other is acting.

The major part 26 of the duplex detent is also formed with a short offset bend 37, Figs. 7, 9, 10 and 13, and with a rectangular opening 36, the minor part 34 being flat and under the offset part and having a circular lower terminal 55 occupying said opening 36, on account of which when the major part 26 is turned in either direction on its pivot 27 the minor part 34 will be turned on its pivot 35 in the opposite direction.

The part 26 of the detent 24 is actuated directly by a bar 29, Figs. 4, 6, 7, 8, 9 and 10, connecting it with the lower end of a substantially vertical lever 30 fulcrumed at 31 to a pendent part of the frame 11. The upper end of the lever 30 is near the rigid portion 3 of the cover of the desk and it is provided with a swiveled spool 32 beneath an opening 56 in said part 3, a spring 33 acting to hold the upper end of the lever toward the right, as appears in Fig. 6. In this position of the lever 30 the part 26 of the detent will incline to the left, as appears in said figure and in Fig. 7, both parts of the detent, 26 and 34, being idle. If, now, by means presently described, the upper end of the lever 30 be pushed to the left, as appears in Fig. 8, the part 26 of the duplex detent 54 will take the position therein shown, and also shown by dotted lines in Fig. 7, the minor member 34 temporarily idling. In this position of the parts the lip 28 of the member 26 will be over the release bar 17 and in position to control it and temporarily prevent it from lifting the catch 15.

To throw the upper end of the lever 30 to the left a lead-pencil 38 is employed passed vertically downward through a cup or holder 39, Figs. 1, 2, 3, 6 and 8, inserted in the opening 56 in the top board 3, the point of the pencil passing tangentially into the spool 32 and serving to crowd it with the adjacent end of the lever 30 toward the left, as above stated. When the pencil is out of the cup and the parts assume the positions shown in Figs. 6 and 7 from the action of the spring 33, the member 34 of the duplex detent will moderately press the adjacent end of the release bar 17, acting temporarily as a stop against the pull of said spring and the further shifting of the part 26 toward the left.

From the above description of the operation of the coacting parts it will be understood that while the pencil 38 is in place in

the cup the cash drawer 10 cannot be opened as the operating end of the release bar 17 is held by the overhanging lip 28 from moving upward to release the catch 15. It will be also understood that when the release bar is raised to lift the catch 15 it will move out of the way of the part 34 and allow the latter to swing under the release bar 17, as appears in Fig. 9, and so temporarily prevent the cash drawer from being closed.

A bell 40, Figs. 4, 6, 13 and 16 is provided to strike each time the spring 13 throws the cash drawer forward or open. The bell is held by a hanger 41 secured to the frame 11, said hanger holding pivotally at its opposite end a vertical pivoted finger 42 carrying a hammer 43 for the bell. The finger 42 is actuated by a spring 44 to bring the hammer down with force. A spring-actuated catch-hook 45 held pivotally at the rear end of the drawer 10 in position to engage the finger 42, acts to pull it temporarily forward and then release it each time the drawer is moved forward, and so ring the bell.

A continuous counter 46, Figs. 13 and 14, is placed in the apartment 8, held by a bracket 50 secured to the rear wall 51 of the apartment. A bent bar 47, Figs. 4, 6, and 13, pivoted to a hanger 48 projecting from the frame 11 and acting as a lever, carries at its upper end a member 49 constituting a connector for said part 47 and the arm 52 of the counter 46. The lever 47 is curled forward at its lower end to meet the rear end of the cash drawer, being pressed there-against by the pull of a spring 53 connecting its upper end with the frame 11. When the drawer 10 is thrown forward by the spring 13, the spring 53 will draw the upper end of the lever 47 and the connector 49 back and so register a count in the continuous counter 46.

The rear door 57 of the desk, Figs. 4, 6, 13 and 16, serves to complete the inclosure and protect the working mechanism back of the cash drawer, the door being provided with a usual lock. The cash drawer 10 is preferably mounted upon rollers in the usual manner, it being provided with a lock in front as is common, the keyhole being shown in Fig. 3.

Modifications in detail of the construction of the desk may be made without departing from the spirit of the invention or sacrificing any of its advantages, for example I may wish in some cases to employ a plurality of drawers like the one shown at 10, duplicating or multiplying the controlling mechanism for the drawers.

What I claim as my invention and desire to secure by Letters Patent is:—

1. A desk and cash holder having a cash drawer, and a frame within the inclosure, a holding catch on the drawer to engage with the frame, a spring to push the drawer, and means insertible from the outside of the desk

to permit the closing of the drawer, and when in place preventing opening of the drawer.

2. A desk and cash holder having a cash drawer and a frame within the inclosure, a holding catch on the drawer to engage with the frame, a release bar on the frame adjacent to the catch, and means insertible from the outside of the desk and removable to move the release bar to disengage the holding catch, said means serving, by its presence, to control the opening and closing of the drawer, and a spring to move the drawer.

3. A desk and cash holder having a cash drawer and an adjacent fixed body, a catch on the drawer to engage with the fixed body, a bar to move the catch, a bell-crank to tilt said bar, a push-rod to turn the bell-crank, and means directly engaging said bar for temporarily holding the same against movement.

4. A desk and cash holder having a cash drawer and an adjacent fixed body, a catch on the drawer to engage with the fixed body, a bar to move the catch, and means for operating it, there being means for temporarily holding the bar motionless.

5. A desk and cash holder having a cash drawer and a fixed frame, a catch on the drawer to engage with the frame, a release bar to lift the catch, a duplex detent for the release bar, a lever with head near the cover of the desk and connector for said detent, the cover having an opening over the lever.

6. A desk and cash holder having a cash drawer and a fixed frame, a catch on the drawer to engage with the frame, a release bar to lift the catch, a duplex detent for the release bar, a lever with head near the cover and connector for said detent, and a spool on the lever, the cover having an opening through which to insert a pencil for shifting the lever.

7. A desk and cash holder having a cash drawer with holding catch, a fixed part to receive the holding catch, a release bar for moving the catch, a duplex detent to control the release bar, and mechanism for operating the detent.

8. A desk and cash holder with cash drawer, and frame within the inclosure, a catch on the drawer to engage with the frame, a spring to move the cash drawer, a bell, and means on the cash drawer to ring the bell, and means insertible from the outside of the desk for holding said catch, and removable for releasing said catch said means serving, by its presence, to control the opening and closing of the drawer.

9. A recording desk and cash holder having a cash drawer and a fixed body back of the cash drawer, and a catch on the drawer to engage with the said fixed body, means insertible from the outside of the desk for holding said catch locked a spring to move the

drawer, said means serving, by its presence, to control the opening and closing of the drawer a continuous counter, and means for advancing the count when the drawer is moved by the spring.

10. A recording desk and cash holder with cash drawer and frame within the inclosure, a catch on the drawer to engage with the frame, a spring to move the cash drawer, a bell on the frame, a spring-controlled lever on the frame pressing the cash drawer, a continuous counter, and a connector for said lever and the counter, and means insertible from the outside of the desk for holding said catch, and removable for releasing the catch said means serving, by its presence, to control the opening and closing of the drawer.

11. A recording desk and cash holder having a cash drawer and a fixed frame back of the drawer, a catch on the drawer to engage with the frame, insertible from the outside of the desk for holding said catch, and removable a release bar to lift the catch, a bell-crank to move the release bar, a push-button with rod to turn the bell-crank, and a spring on the rod to hold it normally out of action said means serving, by its presence, to control the opening and closing of the drawer.

12. A recording desk and cash holder with cash drawer and fixed part within the inclosure, the drawer having a catch to engage with the fixed part, a release bar for the catch, a duplex detent for the release bar and means to operate it, the parts of the detent

acting alternately to control the release bar, one part acting downward against its upper side and the other part acting upward against its lower side, and means for actuating the release bar.

13. A recording desk and cash holder having a cash drawer and adjacent fixed member within the body, a catch on the drawer to engage with the fixed member, a release bar to disengage the catch, a two-part detent for controlling the release bar the two parts being independent and moving in opposite directions and one part actuating the other, and means for shifting the controlling part of the detent.

14. A recording desk and cash holder having a cash drawer and adjacent fixed member within the body, a catch on the drawer to engage with the fixed member, a release bar to disengage the catch, a duplex detent with major and minor parts coacting, the major part being formed with an offset and perforated, the minor part being flat and having a part occupying the opening in the major part, and means for moving the major portion of the detent.

In witness whereof, I have hereunto set my hand this 24th day of June, 1907, in the presence of two subscribing witnesses.

JOSEPH E. BENJAMIN.

Witnesses:

E. B. WHITMORE,
A. M. WHITMORE.