

L. TÁLAS.
LOCK ALARM.

APPLICATION FILED SEPT. 12, 1907.

900,326.

Patented Oct. 6, 1908.
2 SHEETS—SHEET 1.

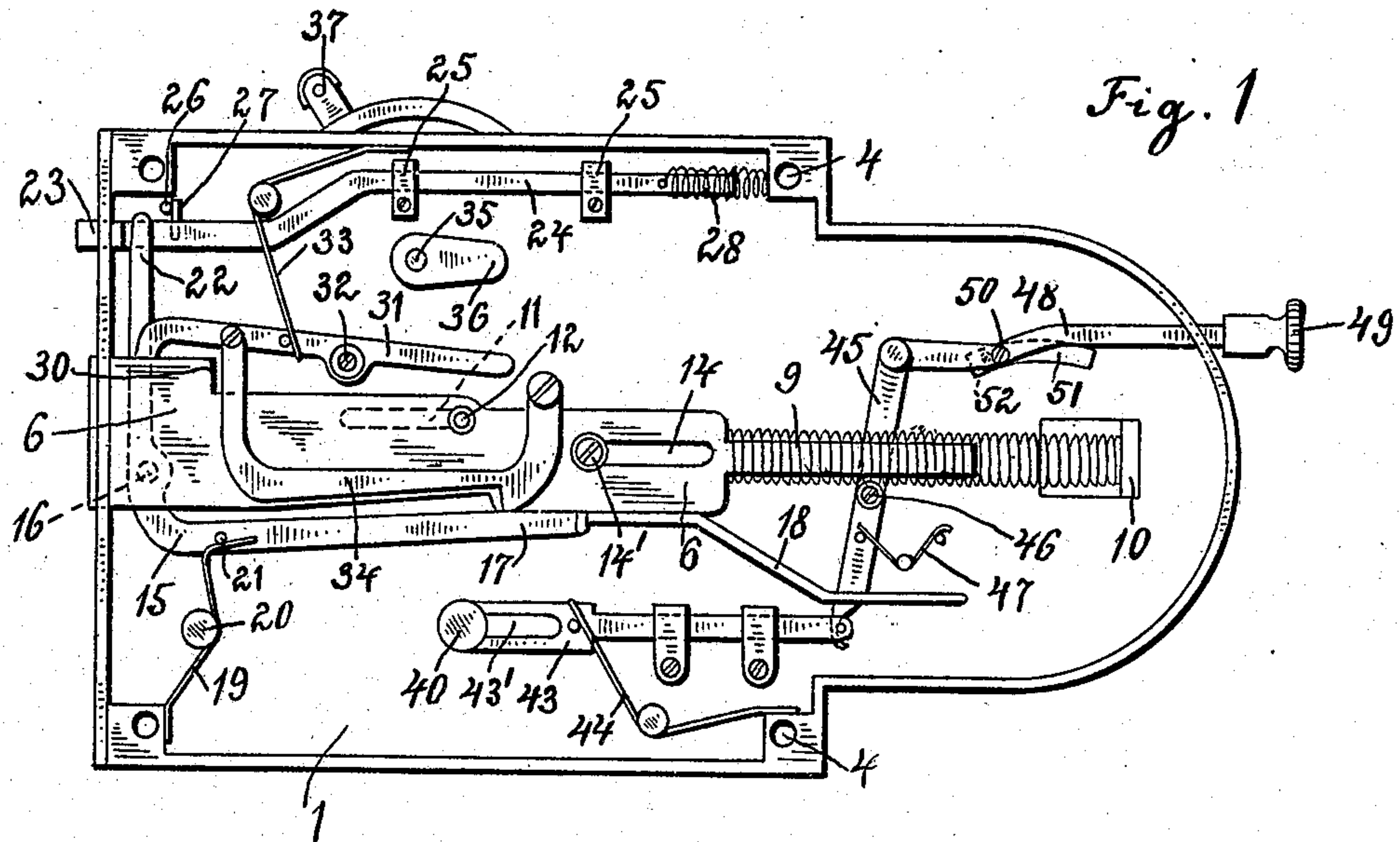


Fig. 1

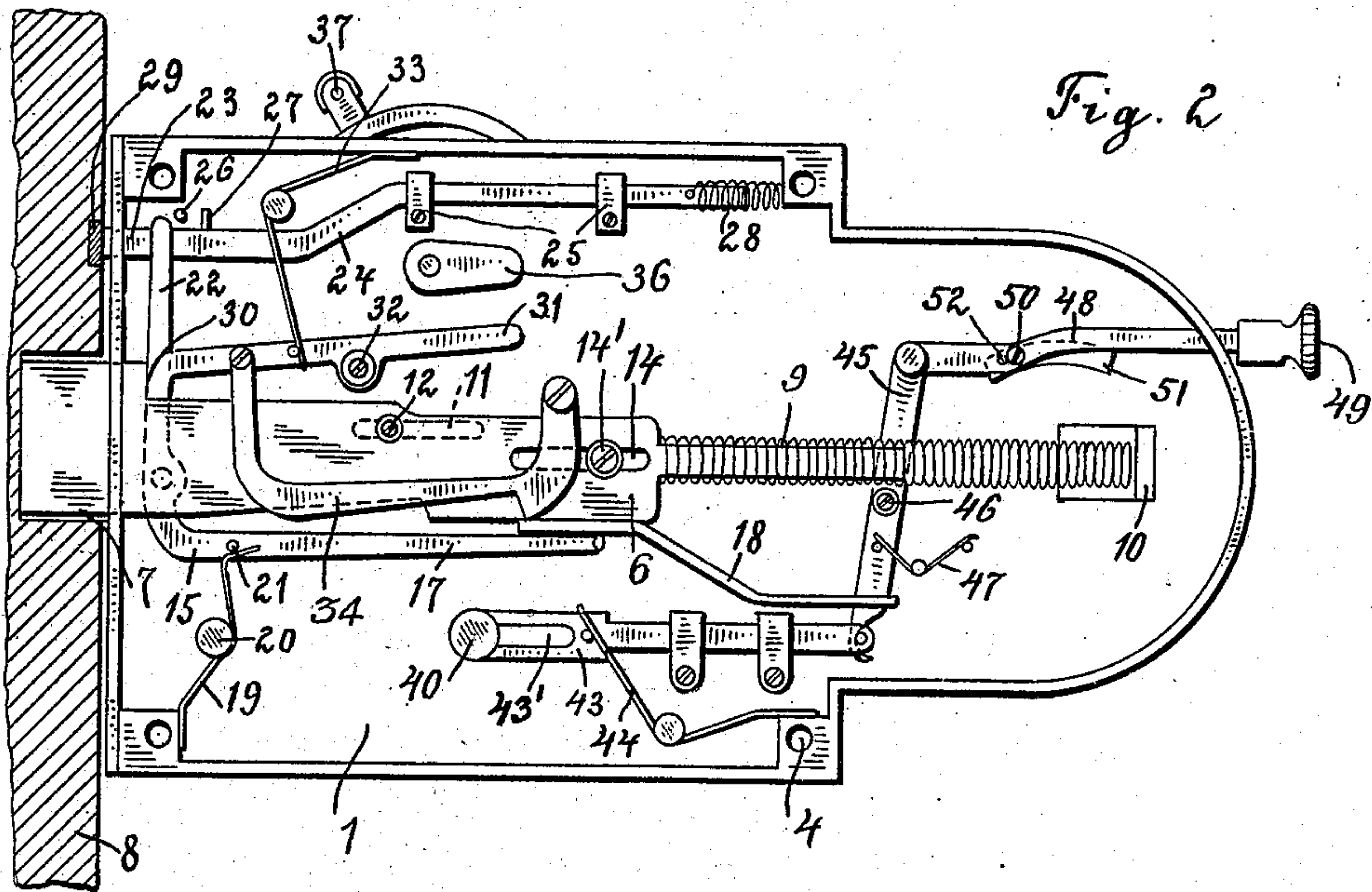


Fig. 2

WITNESSES

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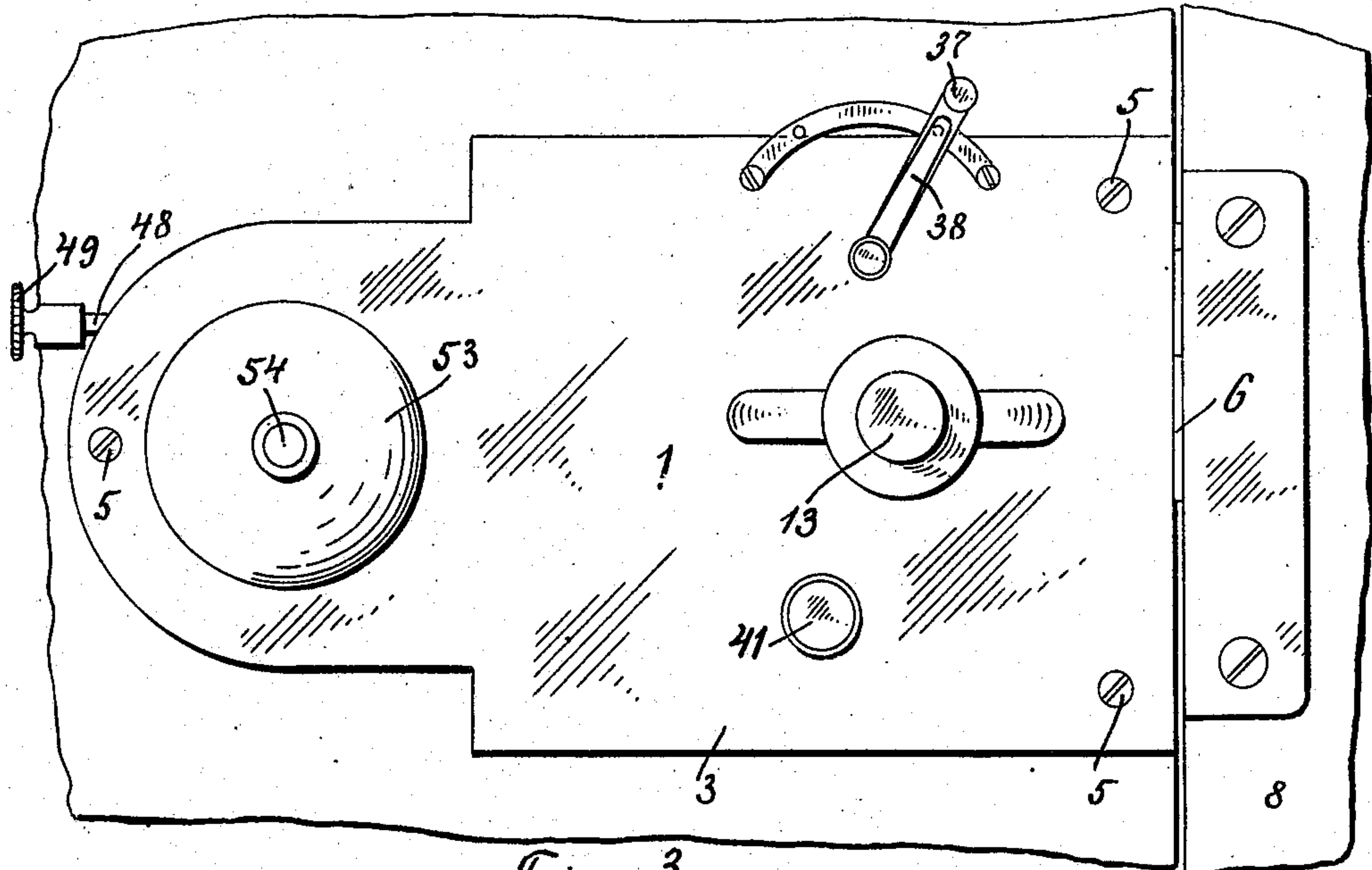


Fig. 3

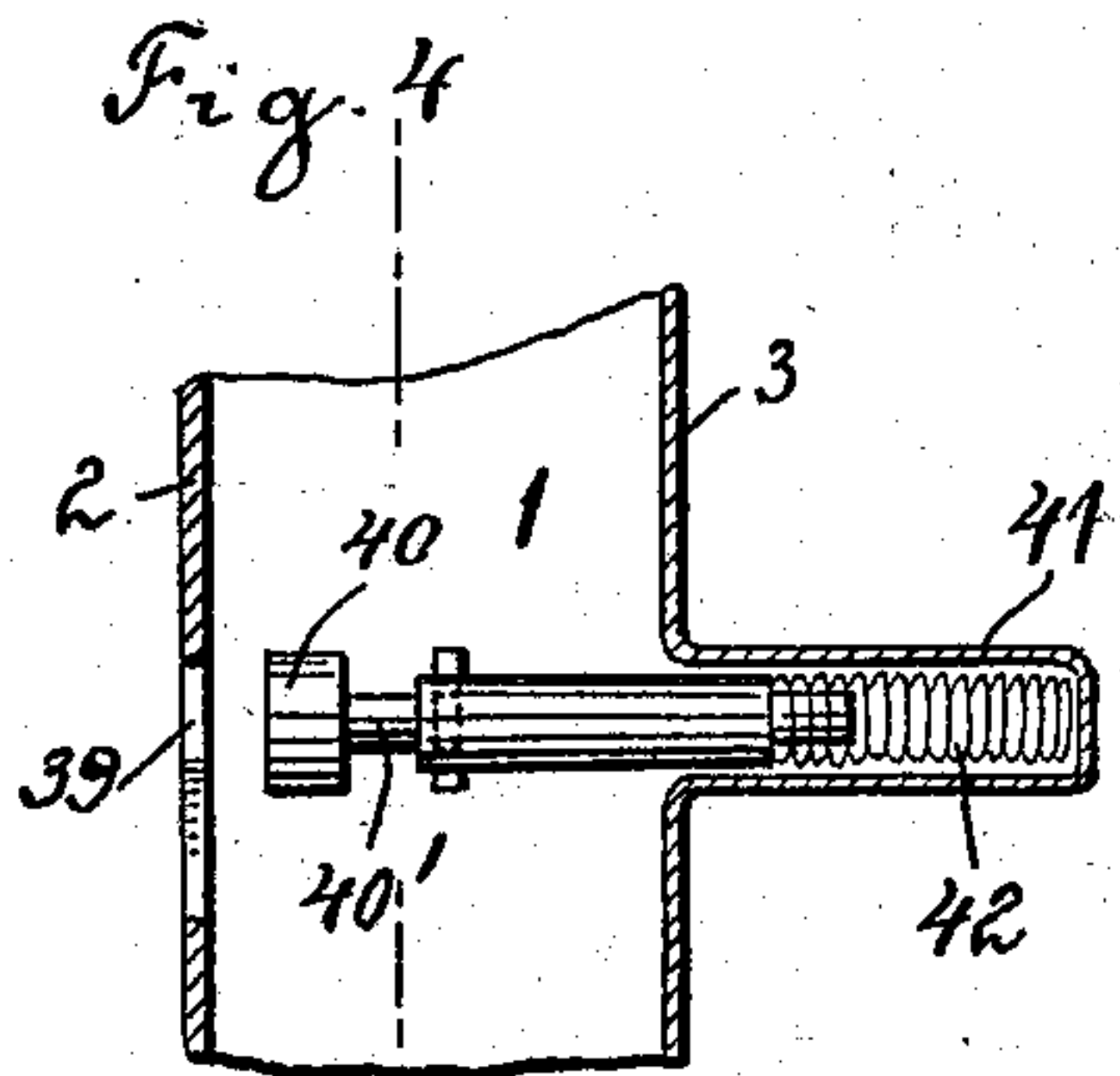


Fig. 4

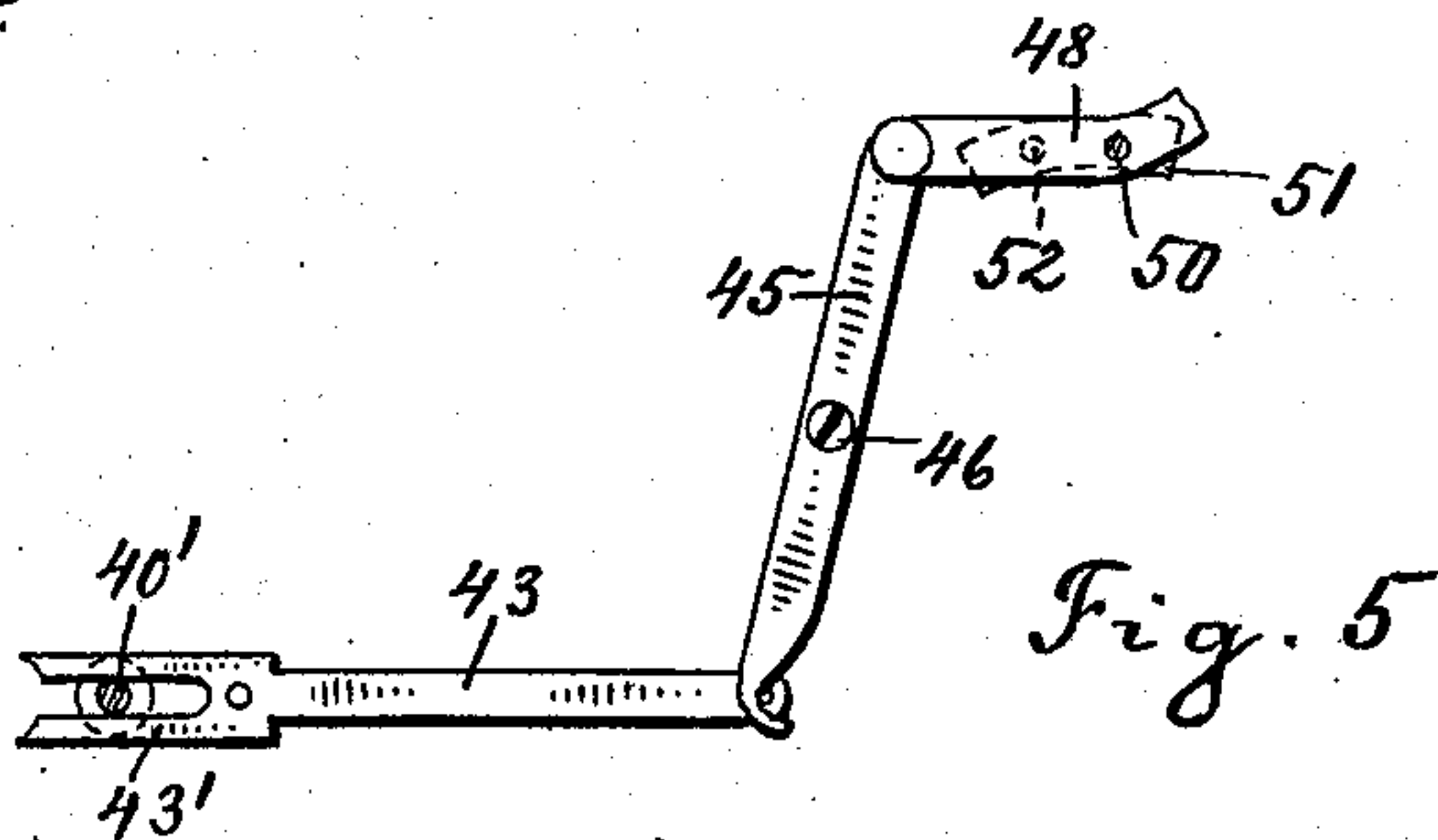


Fig. 5

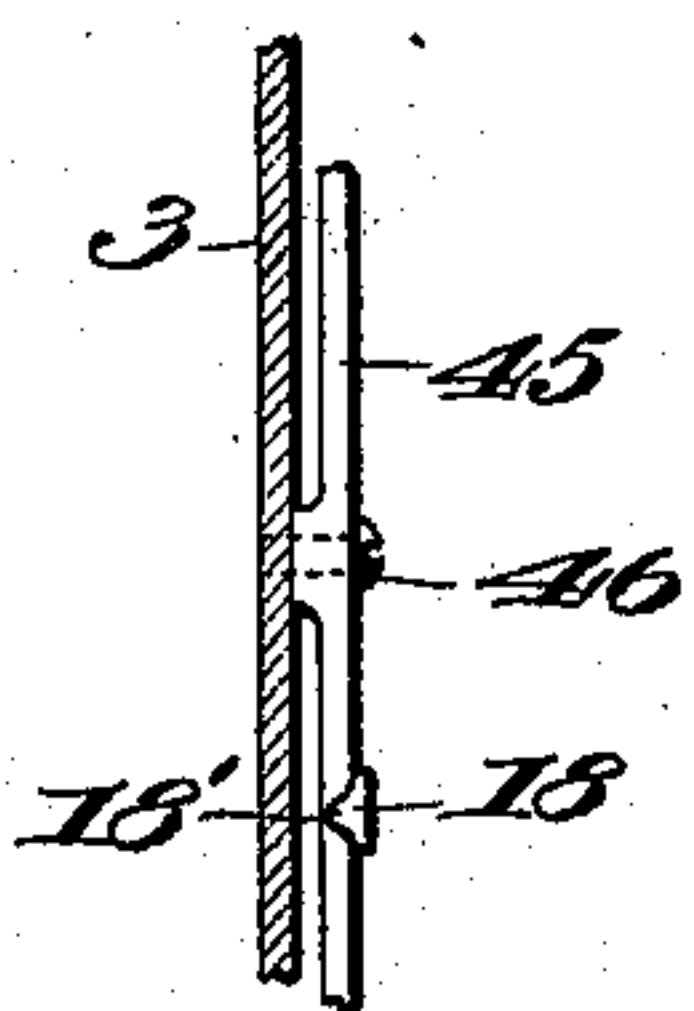


Fig. 7

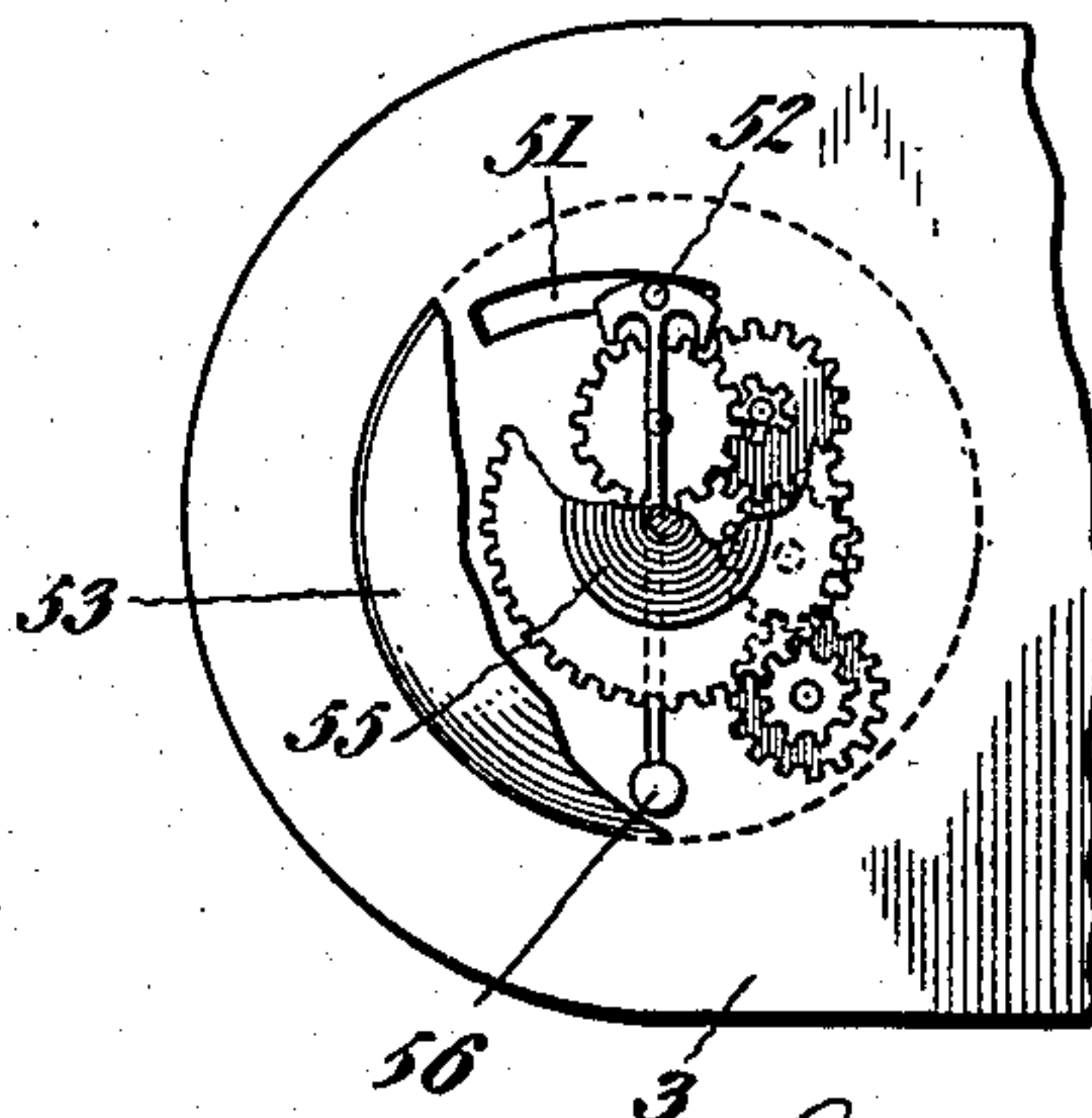


Fig. 6.

WITNESSES

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UNITED STATES PATENT OFFICE.

LOUIS TÁLAS, OF NEW YORK, N. Y.

LOCK-ALARM.

No. 900,326.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed September 12, 1907. Serial No. 392,554.

To all whom it may concern:

Be it known that I, LOUIS TÁLAS, a subject of the King of Hungary, and a resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Lock-Alarms, of which the following is a specification.

The invention relates generally to improvements in door-locks; and the primary objects of the improvements are to provide a lock of this character which will operate audible signals when the door, to which this lock is secured, is opened either by a key or by force.

In general terms the invention consists of a lock, having a lock bolt, the movement of which actuates a plurality of levers, one of which acts as a stop for a hammer, located within a bell and adapted to strike the same, when released. Means are provided, whereby the bell is operated, when a key is inserted into the key-hole of the lock.

The invention is illustrated in the accompanying drawings, in which

Figure 1 is a side elevation of the improved lock, the cap plate being removed to show the operative parts, which are in their normal position taken when the door to which the lock is applied is open. Fig. 2 is a similar view, the parts being shown in a position taken when the door is closed. Fig. 3 is an elevation of the lock, illustrating the lock as applied to a door. Figs. 4, 5, 6 and 7 are details of construction.

Referring to the drawings, 1 represents a lock-case to which are secured a cap-plate 2 and a front-plate 3. The cap-plate 2 may be secured to the lock-case by means of screws, screwed into the holes 4—4 of the lock-case. The lock itself is secured to the door by screws 5—5.

The combined locking-bolt and latch is indicated at 6, forced forward to engage the socket 7 of the door post 8 by means of a spring 9, which latter rests against the combined lock-bolt and latch and against a lug 10, secured to the lock-case.

The lock bolt is of the usual size, having a rectangular bolt-head and a flat plate extending into the lock, in the cap-plate 2 of which there is provided an oblong slot 11 engaging a pin 12, which is secured to the lock bolt 6. This pin 12 protrudes through the slot 11 and carries on its outer end a knob 13, adapted to operate said lock-bolt

from the inner side of the door. The lock-bolt is also provided with an oblong slot 14, engaged by a pin 14'. This pin and the pin 12 support the bolt in a position parallel with the sides of the lock-case. The pin 14', on the other hand, serves as a stop, determining the outward movement of the bolt 6.

15 designates a bellcrank, fulcrumed at 16. The arm 17 of this bell-crank extends along the bolt 6 and engages a bar 18, secured to the bolt 6. The free end of the bar 18 is provided with a projection 18' toward the front plate of the lock case, for a purpose hereinafter to be described.

19 indicates a spring, bent over a pin 20, one end of the same rests against the lock-case, while its other end bears against a pin 21, carried by the bell-crank 15, so that the normal tension of the spring holds the bell-crank against the lock-bolt 6, whereby the arm 17 engages the bar 18, holding thereby the latch in the so called open position. The arm 22 of the bell-crank 15 extends upward, abutting a shoulder 23 of a bar 24, sliding in guides 25—25. The outer end of the bar 24 protrudes through a hole of the lock-case, so that it may be operated by the door post, when the door is closed. The outward movement of the bar 24 is determined by a stop 26 and a pin 27, secured to the bar, which latter is held under the tension of a spring 28.

From the foregoing description it will be seen, that when the outer end of the bar 24 hits against the lug 29, secured to the door post 8, the shoulder 23 will operate the bell-crank 15, whereby the arm 17 releases the bar 18; spring 9 will thus push the bolt 6 forward, so that it will enter the socket 7, provided therefor on the door post.

The bolt 6 is provided with a projection 30, adapted to engage the tumbler 31, fulcrumed at 32 to the lock-case and held under the tension of a spring 33, tending to press the tumbler against the bolt 6. To the tumbler is secured an auxiliary tumbler 34, one end of which is pivotally connected to the main tumbler 31, while its other end is in a similar way secured to the lock-case.

A spindle 35 is supported in the lock-case; the inner end of the spindle carries an arm 36 adapted to bring the tumbler 31 out of operative connection with the lock bolt 6. The spindle may be operated by means of a lever 37 secured thereto and located on the outer side of the lock-case. A spring 38

rests against the lever 37, holding the same in the position desired. The purpose of this device 36 will be hereinafter more fully described.

5 The keyhole of the lock is indicated at 39, and covering the inside entrance of the keyhole is located a stem 40, so that a key cannot enter from the outside until the stem 40 is removed. A cylindrical extension 41 is
10 secured to the front plate 3 of the lock-case, closed at its outer end, and adapted to receive the stem 40 when pushed into the same by a key, entering from the outside. The spring 42 tends to hold the stem near to the
15 keyhole 39. A bar 43, having a forked end 43', rests against the spindle 40 and is normally held in this position by a spring 44. The free end of the arm 43 is engaged by a lever 45, fulcrumed at 46, and held under
20 the tension of the spring 47. The other arm of the lever 45 is pivotally connected to a bar 48, protruding through a hole of the casing and carrying a knob 49, so that this bar may be shifted from outside of the casing by
25 means of the knob 49. A pin 50 is secured to the arm 48 and protrudes through a slot 51, formed in the lock-case. This pin normally holds against rotation a motor, such as a clock-work 55 and a hammer 56 operated by this clock-work. On shifting the
30 arm, the pin 50 releases the pin 52 of the clock-work, allowing thereby the hammer to strike and ring the bell 53 carried by the front plate 3 of the lock-case. The clock-
35 work is located within the bell 53 and may be wound up by a knob 54, located outside of the casing and the bell.

Fig. 1 shows the lock as it appears when the door is open.

40 As mentioned hereinbefore, the stem 40 covers the inside entrance of the keyhole 39, so that the key cannot enter from the outside until the obstruction is removed. The obstruction being removed, the key lifts the
45 tumbler 31 by means of the lever 34 and then withdraws the bolt 6 from its socket 7. The key pushes the stem 40 into the cylin-

drical portion 41 until the portion 40' of the stem 40 allows the forked end of the bar 43 to advance, whereby the lever 45 and the
50 lever 48, connected thereto, will be moved so that the pin 52 of the clock-work be released and the clock-work and the hammer ring the bell, indicating thereby that a key has been
55 inserted into the keyhole or that somebody is trying by some other means to open the door. When the person, opening the door has entered the room, the same may by means of the knob 49 bring the pin 50 to its normal
60 position, stopping thereby the ringing of the bell.

As shown in Fig. 2, the pins 12 and 14' allow of a further outward movement of the latch 6. Should therefore a person try to open the door by means of any instrument
65 breaking away a portion of the door post 8, then the lock bolt 6 will move forward and by means of the projection 18' of the lever 18 operate levers 45 and 48, releasing thereby the clock-work, so that the bell will be
70 actuated and indicate the opening of the door.

What I claim is:

In a lock alarm, the combination with a lock case having a key hole, of a bolt extend-
75 ing into said key hole, a forked bar operatively held against said bolt, a bell, a clock-work in said bell adapted to actuate a hammer for ringing said bell, a stop-bar carrying a stop for said clock-work, a lever con-
80 necting said stop-bar and said forked bar, and a spring keeping said forked bar in operative engagement with said bolt and said stop against said clock-work, combined and arranged in the manner and for the purpose
85 substantially as specified.

Signed at New York, in the county of New York and State of New York, this 20th day of August, A. D. 1907.

LOUIS TALAS.

Witnesses:

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S. BIRNBAUM.